BS EN 60704-2-1:2015

BSI Standards Publication

Household and similar electrical appliances — Test code for the determination of airborne acoustical noise

Part 2-1: Particular requirements for vacuum cleaners

bsi.

...making excellence a habit.™

Document Sharing Hub

Full document details: BS EN 60704-2-1:2015

National foreword

This British Standard is the UK implementation of EN 60704-2-1:2015. It is identical to IEC 60704-2-1:2014. It supersedes BS EN 60704-2-1:2001 which is withdrawn.

The UK participation in its preparation was entrusted by Technical Committee CPL/59, Performance of household electrical appliances, to Subcommittee CPL/59/6, Floor treatment appliances.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2015.
Published by BSI Standards Limited 2015

ISBN 978 0 580 77337 2
ICS 17.140.20; 97.080

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 January 2015.

Amendments/corrigenda issued since publication

Date	Text affected

Documents
Document Sharing Hub

Full document details: BS EN 60704-2-1:2015

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60704-2-1

January 2015

ICS 17.140.20; 97.080

Supersedes EN 60704-2-1:2001

English Version

Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-1: Particular requirements for vacuum cleaners (IEC 60704-2-1:2014)

Appareils électrodomestiques et analogues - Code d'essai pour la détermination du bruit aérien - Partie 2-1: Exigences particulières pour les aspirateurs (IEC 60704-2-1:2014)

Elektrische Geräte für den Hausgebrauch und ähnliche Zwecke -Prüfvorschrift für die Bestimmung der Luftschallemission -Teil 2-1: Besondere Anforderungen an Staubsauger (IEC 60704-2-1:2014)

This European Standard was approved by CENELEC on 2014-06-26. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

© 2015 CENELEC All rights of exploitation in any form and by any means reserved worldwide for CENELEC Members.

Ref. No. EN 60704-2-1:2015 E

AVA Documents Document Sharing Hub

Full document details: BS EN 60704-2-1:2015

Foreword

The text of document 59F/255/FDIS, future edition 3 of IEC 60704-2-1, prepared by SC 59F: "Floor treatment appliances" of IEC/TC 59: "Performance of household and similar electrical appliances." was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60704-2-1:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2015-07-09
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-06-26

This document supersedes EN 60704-2-1:2001.

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.

Endorsement notice

The text of the International Standard IEC 60704-2-1:2014 was approved by CENELEC as a European Standard without any modification.

Documents
Document Sharing Hub
Full document details: BS EN 60704-2-1:2015

Annex ZA
(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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Addition *to Annex ZA of EN 60704-1:2010:*

Publication	Year	Title	EN/HD	Year
IEC 60312-1 (mod)	2010	Vacuum cleaners for household use - Part 1: Dry vacuum cleaners - Methods for measuring the performance	EN 60312-1 +prA	2013

Documents
Document Sharing Hub
Full document details: BS EN 60704-2-1:2015

Annex ZZ
(informative)

Clauses of this European Standard addressing essential requirements or other provisions of EU Directives

This European Standard has been prepared under a mandate given to CENELEC by the European Commission to provide reliable, accurate and reproducible procedures and methods of measuring airborne acoustical noise of household appliances, which take into account the recognised state-of-the-art measurement methods.

This European Standard in conjunction with Part 1 specifies the test code for the determination of airborne acoustical noise emission of vacuum cleaners for household and similar use. It shall be applied implementing:

– Commissions delegated Regulation (EU) No 665/2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of vacuum cleaners;

– Commission Regulation (EU) No 666/2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for vacuum cleaners.

For determining and verifying airborne acoustical noise emission values declared on a printed label as well as in a product fiche and in the technical documentation, see EN 60704-3.

WARNING: Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.

Documents
Document Sharing Hub
Full document details: BS EN 60704-2-1:2015

CONTENTS

1 Scope and object 6
1.1 Scope 6
1.1.1 General 6
1.1.2 Types of noise 6
1.1.3 Size of the source 6
1.2 Object 6
1.3 Measurement uncertainty 7
2 Normative references 8
3 Terms and definitions 8
4 Measurement methods and acoustical environments 9
5 Instrumentation 10
5.1 Instrumentation for measuring acoustical data 10
6 Operation and location of appliances under test 10
6.1 Equipping and pre-conditioning of appliances 10
6.2 Supply of electric energy and of water or gas 11
7 Measurement of sound pressure levels 13
8 Calculation of sound pressure and sound power levels 14
9 Information to be recorded 14
10 Information to be reported 14
Annexes 17
Annex A (normative) Standard test table 17

Figure 101 – Appliance with cleaning head connected directly 15
Figure 102 – Appliance with the cleaning head connected by hose and connecting tube 16

Table 101 – Standard deviations of sound power levels determined on carpets 7
Table 102 – Standard deviations of sound power levels determined on hard floors 7
Table 103 – Standard deviations for declaration and verification for vacuum cleaners for carpets 7
Table 104 – Standard deviations for declaration and verification hard floors 7
Table 105 – Wilton type carpet specifications 9

Documents
Document Sharing Hub
Full document details: BS EN 60704-2-1:2015