



BSI Standards Publication

**A.C. ventilating fans and regulators for
household and similar purposes – Methods for
measuring performance (IEC 60665:2018)**

National foreword

This British Standard is the UK implementation of EN IEC 60665:2019. It is identical to IEC 60665:2018.

The UK participation in its preparation was entrusted to Technical Committee CPL/59, Performance of household electrical 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 2019

Published by BSI Standards Limited 2019

ISBN 978 0 580 95490 0

ICS 23.120

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 2019.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

English Version

**A.C. ventilating fans and regulators for household and similar
purposes - Methods for measuring performance
(IEC 60665:2018)**

Aérateurs à courant alternatif et régulateurs pour
applications domestiques et analogues - Méthodes de
mesure de l'aptitude à la fonction
(IEC 60665:2018)

Lüftungsventilatoren und Regler in Klimaanlage für den
Hausgebrauch und ähnliche Zwecke - Verfahren zur
Messung der Gebrauchseigenschaften
(IEC 60665:2018)

This European Standard was approved by CENELEC on 2018-12-28. 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.

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, Serbia, 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: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 59L/139/CDV, future edition 2 of IEC 60665, prepared by SC 59L "Small household 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 IEC 60665:2019.

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) 2019-09-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-12-28

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

Endorsement notice

The text of the International Standard IEC 60665:2018 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 60335-2-80	NOTE	Harmonized as EN 60335-2-80
IEC 60704-2-7	NOTE	Harmonized as EN 60704-2-7
IEC 60879	NOTE	Harmonized as EN 60879 ¹
IEC 61000-3-2	NOTE	Harmonized as EN 61000-3-2
IEC 61000-3-3	NOTE	Harmonized as EN 61000-3-3
CISPR 14-1	NOTE	Harmonized as EN 55014-1
CISPR 14-2	NOTE	Harmonized as EN 55014-2

¹ Under preparation. Stage at the time of publication: prEN 60879

Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 5801	2007	Industrial fans - Performance testing using standardized airways	-	-

This page deliberately left blank

CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references	5
3 Terms and definitions	5
4 Bearings.....	7
5 Speed regulators	7
6 Marking	7
7 Tests	7
7.1 General.....	7
7.2 Test voltage	8
7.3 Test frequency.....	8
7.4 Limits of voltage variation	8
7.5 Tests for air delivery performance.....	8
8 Tolerances on fan ratings	8
8.1 Partition type ventilating fans (Type A).....	8
8.2 Free inlet partition ventilating fans (Type B), free outlet partition ventilating fans (Type C) and fully ducted ventilating fans (Type D)	8
Annex A (normative) Air delivery performance evaluation	9
Bibliography.....	16
Figure A.1 – Plot of partial pressure of water vapour in the air against laboratory ambient temperature for different values of relative humidity (RH)	10
Figure A.2 – Type A test installation (outlet-side multiple nozzle test chamber).....	12
Figure A.3 – Type B test installation (without antistair device) using multiple nozzle test chamber	13
Figure A.4 – Type C test installation (inlet-side test chamber).....	14
Figure A.5 – Type D using Type B (outlet-side test duct) without antistair device, without common segment and with inlet-duct simulation	15