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Irish Standard
I.S. EN IEC 61591:2020&A11:2020

Cooking fume extractors - Methods for measuring performance

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NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61591:2020/A11

July 2020

ICS 97.040.20

English Version

Cooking fume extractors - Methods for measuring performance

Extracteurs de fumée de cuisine - Méthodes de mesure de l'aptitude à la fonction

Absauger für Kochdünste - Verfahren zur Messung der Gebrauchseigenschaft

This amendment A11 modifies the European Standard EN IEC 61591:2020; it was approved by CENELEC on 2019-07-24. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

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European foreword

This document (EN IEC 61591:2020/A11:2020) has been prepared by CLC/TC 59X "Performance of household and similar electrical appliances".

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)	2021-01-10
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For the relationship with EU Regulations see informative Annex ZZA and Annex ZZB which are integral parts of this document.

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 61591:2019 are prefixed “Z”.

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NORME EUROPÉENNE

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EN IEC 61591

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English Version

Cooking fume extractors - Methods for measuring performance (IEC 61591:2019)

Extracteurs de fumée de cuisine - Méthodes de mesure de l'aptitude à la fonction (IEC 61591:2019)

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European foreword

The text of document 59K/304/CDV, future edition 2 of IEC 61591, prepared by SC 59K "Performance of household and similar electrical cooking 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 61591:2020.

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IEC 60335-2-31	NOTE	Harmonized as EN 60335-2-31
IEC 60704-3	NOTE	Harmonized as EN 60704-3

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NORME INTERNATIONALE

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Extracteurs de fumée de cuisine – Méthodes de mesure de l'aptitude à la fonction

IEC 61591:2019-10(en-fr)

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NORME INTERNATIONALE

Cooking fume extractors – Methods for measuring performance

Extracteurs de fumée de cuisine – Méthodes de mesure de l'aptitude à la fonction

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COOKING FUME EXTRACTORS – METHODS FOR MEASURING PERFORMANCE

FOREWORD

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International Standard IEC 61591 has been prepared by subcommittee 59K: Performance of household and similar electrical cooking appliances, of IEC technical committee 59: Performance of household and similar electrical appliances.

This second edition cancels and replaces the first edition published in 1997, Amendment 1:2005 and Amendment 2:2010. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) new subclause about instruments and measurements (see 6.6);
b) new procedure for measuring the fluid dynamic efficiency (FDE), which follows the CENELEC proposal in principle;
c) revised procedure for determining the odour reduction for cooking fume extractors in recirculation mode (see Clause 12);
d) modification to the measurement of the effectiveness of the lighting system (see Clause 11);
e) clearer procedure to measure the grease absorption (see Clause 13);

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The text of this International Standard is based on the following documents:

CDV	Report on voting
59K/304/CDV	59K/306/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

In this standard, the following print types are used:

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COOKING FUME EXTRACTORS – METHODS FOR MEASURING PERFORMANCE

1 Scope

This document applies to **cooking fume extractors** incorporating a fan for the **recirculation** or **extraction mode** situated in a household kitchen.

It can also be used for **cooking fume extractors** where the fan is mounted separately from the appliance, but controlled by the appliance when the fan is defined in the technical documentation (e.g. name plate data) and instructions for installation.

This document deals also with **down-draft systems** arranged beside, behind or under the cooking appliance.

This document defines the main performance characteristics of these appliances, which are of interest to the user, and specifies methods for measuring these characteristics.

This document does not specify a classification or ranking for performance.

NOTE This document does not deal with safety requirements that are in accordance with IEC 60335-1 and IEC 60335-2-31.

2 Normative references

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.

IEC 60584-1, *Thermocouples – Part 1: EMF specifications and tolerances*

IEC 60704-2-13, *Household and similar electrical appliances – Test code for the determination of airborne acoustical noise – Part 2-13: Particular requirements for range hoods and other cooking fume extractors*

IEC 62301, *Household electrical appliances – Measurement of standby power*

ISO 5167-1, *Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full – Part 1: General principles and requirements*

ISO 5167-2, *Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full – Part 2: Orifice plates*

ISO 5167-3, *Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full – Part 3: Nozzles and Venturi nozzles*

ISO 5167-4, *Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full – Part 4: Venturi tubes*

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