



SLOVENSKI STANDARD

SIST EN 61591:2001

01-februar-2001

Household range hoods - Methods for measuring performance

Household range hoods - Methods for measuring performance

Haushalt-Dunstabzugshauben - Verfahren zur Messung der Gebrauchseigenschaft

Hottes de cuisine à usage domestique - Méthodes de mesure de l'aptitude à la fonction

Ta slovenski standard je istoveten z: **EN 61591:1997**

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ICS:

97.040.20	Štedilniki, delovni pulti, pečice in podobni aparati	Cooking ranges, working tables, ovens and similar appliances
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en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61591

September 1997

ICS 97.040.20

English version

**Household range hoods - Methods for measuring performance
(IEC 61591:1997)**

Hottes de cuisine à usage domestique
Méthodes de mesure de l'aptitude à la
fonction
(CEI 61591:1997)

Haushalt-Dunstabzugshauben
Verfahren zur Messung der
Gebrauchseigenschaft
(IEC 61591:1997)

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CENELEC

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

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

Foreword

The text of document 59/171/FDIS, future edition 1 of IEC 61591, prepared by IEC TC 59, Performance of household electrical appliances, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61591 on 1997-07-01.

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) 1998-04-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 1998-04-01

Endorsement notice

The text of the International Standard IEC 61591:1997 was approved by CENELEC as a European Standard without any modification.

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**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

61591

Première édition
First edition
1997-05

**Hottes de cuisine à usage domestique –
Méthodes de mesure de l'aptitude
à la fonction**

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Methods for measuring performance
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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD RANGE HOODS – METHODS FOR MEASURING PERFORMANCE

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61591 has been prepared by IEC technical committee 59: Performance of household electrical appliances.

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

FDIS	Report on voting
59/171/FDIS	59/181/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.

HOUSEHOLD RANGE HOODS – METHODS FOR MEASURING PERFORMANCE

1 Scope

This International Standard applies to range hoods incorporating a fan for the recirculation or forced removal of air from above a hob situated in a household kitchen.

This standard defines the main performance characteristics of range hoods and specifies methods for measuring these characteristics, for the information of users.

This standard does not specify required values for performance characteristics.

NOTE – This standard does not deal with:

- safety requirements (IEC 60335-2-31)¹⁾;
- acoustical noise.

2 Normative reference

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 5167-1: 1991, *Measurement of fluid flow by means of pressure differential devices – Part 1: Orifice plates, nozzles and Venturi tubes inserted in circular cross-section conduits running full*

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3 Definitions <https://standards.iteh.ai/catalog/standards/sist/60640843-b8b6-437c-993a-f679def13b2/sist-en-61591-2001>

For the purpose of this International Standard, the following definitions apply.

3.1 range hood: Appliance installed over a hob and through which air is passed to remove contaminants from the room.

3.2 recirculating-air range hood: Range hood containing filters to remove contaminants after which the cleaned air is discharged back into the room.

3.3 air-extraction range hood: Range hood which discharges the collected air to the outside of the building by means of ducting.

3.4 rated voltage: Voltage assigned to the range hood by the manufacturer.

3.5 grease absorption factor: The percentage of grease retained within a filter.

3.6 odour reduction factor: The capability of the range hood to reduce odours.

3.7 odour dispersion time: Time taken to reduce odours to a defined level after the odour generating source has been switched off.

¹⁾ IEC 60335-2-31:1995, *Safety of household and similar electrical appliances – Part 2: Particular requirements for range hoods*

4 Classification

According to type:

- recirculating-air range hood;
- air-extraction range hood.

NOTE – A range hood may be constructed to incorporate both types.

5 List of measurements

Performance is determined by assessing the following:

- overall dimensions;
- maximum effective capture area;
- length of supply cord;
- mass;
- volumetric airflow;
- ability to absorb grease;
- ability to extract odours;
- effectiveness of hob light;
- maintenance;
- features.

6 General conditions for measurements

Unless otherwise specified, the measurements are made under the following conditions.

6.1 Test room

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The tests are carried out in a substantially draught-free room. The ambient temperature of the room is maintained at $20\text{ °C} \pm 5\text{ °C}$.

6.2 Installation

The range hood is installed in accordance with the manufacturer's instructions.

6.3 Supply voltage

The range hood is supplied at the rated voltage $\pm 1\%$.

If a voltage range is specified by the manufacturer the range hood is to be supplied at the nominal voltage of the country in which the appliance is intended to be used. In this case the test voltage has to be stated in the report.

6.4 Filters

The range hood is fitted with new filters for each test of clauses 12 and 13.

6.5 Fan control

The tests are carried out with any fan control adjusted to the highest setting for normal use.

NOTES

- 1 If a boost position is incorporated, this is not taken into account.
- 2 A boost position is a setting of a control for occasional use which results in a higher temporary fan speed.