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## Elektriska hushållsapparater för matlagning – Del 1: Spisar, ugnar, ångugnar och grillar – Funktionsprovning

*Household electric cooking appliances –  
Part 1: Ranges, ovens, steam ovens and grills –  
Methods for measuring performance*

Som svensk standard gäller europastandarden EN 60350-1:2016. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60350-1:2016.

### Nationellt förord

Europastandarden EN 60350-1:2016

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60350-1, Second edition, 2016 - Household electric cooking appliances - Part 1: Ranges, ovens, steam ovens and grills - Methods for measuring performance**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 60350-1, utgåva 1, 2013 och SS-EN 60350-1/A11, utgåva 1, 2014, gäller ej fr o m 2019-11-04.

Beräkningsexempel till standarden kan laddas ner i form av en Excel-fil från SEKs webbplats.

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English Version

## Household electric cooking appliances - Part 1: Ranges, ovens, steam ovens and grills - Methods for measuring Performance (IEC 60350-1:2016 , modified)

Appareils de cuisson électrodomestiques - Partie 1:  
Cuisinières, fours, fours à vapeur et grills - Méthodes de  
mesure de l'aptitude à la fonction  
(IEC 60350-1:2016 , modifiée)

Elektrische Kochgeräte für den Hausgebrauch - Teil 1:  
Herde, Backöfen, Dampfgarer und Grills - Verfahren zur  
Messung der Gebrauchseigenschaften  
(IEC 60350-1:2016 , modifiziert)

This European Standard was approved by CENELEC on 2016-06-03. 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.

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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**

## **European foreword**

The text of document 59K/263/CDV, future edition 2 of IEC 60350-1, 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 60350-1:2016.

A draft amendment, which covers common modifications to IEC 60350-1 (59K/263/CDV), was prepared by CLC/TC 59X "Performance of household and similar electrical appliances" and approved by CENELEC.

The following dates are fixed:

- latest date by which the document has to be (dop) 2017-05-04  
implemented at national level by  
publication of an identical  
national standard or by endorsement
- latest date by which the national (dow) 2019-11-04  
standards conflicting with the document  
have to be withdrawn

This document supersedes EN 60350-1:2013.

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Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 60350-1:2016 are prefixed "Z".

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Regulations.

For the relationship with EU Regulations see informative Annex ZZA, Annex ZZB and Annex ZZC which are integral parts of this document.

## **Endorsement notice**

The text of the International Standard IEC 60350-1:2016 was approved by CENELEC as a European Standard with agreed common modifications.

## 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](http://www.cenelec.eu)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60584-2	1982	Thermocouples - Part 2: Tolerances	EN 60584-2	1993
IEC 62301	-	Household electrical appliances - Measurement of standby power	EN 50564	-
ISO 80000-1	2009	Quantities and units - Part 1: General	EN ISO 80000-1	2013
CIE 15.2		Colorimetry	-	-

## CONTENTS

FOREWORD.....	6
1 Scope.....	8
2 Normative references.....	8
3 Terms and definitions .....	9
4 List of measurements.....	11
4.1 Dimensions and mass .....	11
4.2 Oven and combi steam oven .....	11
4.3 Steam oven and combi steam oven .....	11
4.4 Grill .....	11
4.5 Warming compartments.....	11
4.6 Cleaning .....	12
5 General conditions for the measurement .....	12
5.1 Test room .....	12
5.2 Electricity supply.....	12
5.3 Instrumentation .....	13
5.4 Positioning the appliance.....	13
5.5 Preheating .....	14
5.6 Setting of controls .....	14
5.7 Rounding .....	14
6 Dimensions and mass.....	14
6.1 Overall dimensions.....	14
6.2 Usable internal dimensions and calculated volume.....	16
6.2.1 General .....	16
6.2.2 Usable height.....	18
6.2.3 Usable width .....	18
6.2.4 Usable depth .....	18
6.2.5 Calculated volume .....	18
6.3 Overall internal dimensions and overall volume.....	18
6.3.1 General .....	18
6.3.2 Overall height ( <i>H</i> ).....	19
6.3.3 Overall width ( <i>W</i> ).....	19
6.3.4 Overall depth ( <i>D</i> ) .....	19
6.3.5 Overall volume of rectangular cavities .....	19
6.3.6 Overall volume of non-rectangular cavities .....	19
6.4 Dimensions of shelves and steaming accessories .....	19
6.5 Dimensions of grill grids .....	19
6.6 Dimensions of warming compartments.....	19
6.7 Level of shelf .....	20
6.8 Mass of the appliance .....	20
7 Ovens and combi steam ovens.....	20
7.1 General.....	20
7.2 Preheating the empty oven.....	21
7.3 Accuracy of the control.....	21
7.4 Energy consumption and time for heating a load .....	22
7.4.1 Purpose .....	22
7.4.2 Test load .....	22

7.4.3	Measurement.....	24
7.4.4	Evaluation and calculation.....	27
7.4.5	Reporting of test results .....	28
7.5	Heat distribution.....	28
7.5.1	General .....	28
7.5.2	Shortbread.....	28
7.5.3	Small cakes .....	31
7.6	Ability to supply heat .....	37
7.6.1	Fatless sponge cake .....	37
7.6.2	Apple pie .....	38
8	Steam ovens and combi steam ovens.....	39
8.1	Ability to supply steam .....	39
8.1.1	Purpose .....	39
8.1.2	Ingredients and steaming accessory .....	39
8.1.3	Procedure .....	40
8.1.4	Assessment .....	41
8.2	Distribution of steam .....	42
8.2.1	Purpose .....	42
8.2.2	Ingredients, steaming accessories and number of levels .....	42
8.2.3	Procedure .....	42
8.2.4	Assessment .....	43
8.3	Determination of the capacity .....	45
8.3.1	Purpose .....	45
8.3.2	Ingredients.....	45
8.3.3	Mass of peas, steaming accessories and number of levels.....	45
8.3.4	Procedure.....	46
8.3.5	Assessment.....	47
8.4	Accuracy of the temperature control .....	48
9	Grills .....	49
9.1	Purpose .....	49
9.2	Grilling area .....	49
9.2.1	Purpose .....	49
9.2.2	Procedure.....	49
9.2.3	Assessment.....	49
9.3	Grilling.....	50
9.3.1	Purpose.....	50
9.3.2	Ingredients.....	50
9.3.3	Procedure.....	50
9.3.4	Assessment.....	50
10	Warming compartments .....	50
11	Cleaning.....	51
11.1	Pyrolytic self-cleaning ovens .....	51
11.2	Ovens with catalytic cleaning.....	51
12	Consumption measurement of low power modes .....	52
Annex A (normative) Colour measuring instrument .....		53
Annex B (normative) Brown shade charts .....		54
Annex C (informative) Addresses of suppliers.....		56
C.1	General.....	56

C.2	Testing ingredients for small cakes .....	56
C.3	Food mixer .....	57
C.4	Lamp for digital measurement systems .....	58
C.5	Digital measurement system .....	58
C.6	Colour measuring instrument .....	59
C.7	Brick for testing energy consumption of ovens .....	59
C.8	Steaming basket .....	59
Annex D (normative)	Description of the test brick .....	60
D.1	Specification .....	60
D.2	Supplier and order specification .....	60
Annex E (informative)	Data and calculation sheet: Energy consumption for heating a load (7.4) .....	62
Annex F (normative)	Green shade charts .....	64
Annex G (informative)	Measurement of the energy consumption of the cooling down period .....	66
G.1	Purpose .....	66
G.2	Preliminary measurements .....	66
G.3	Measuring the energy consumption of the cooling down period .....	67
Annex H (informative)	Check of applied microwave energy during the measurement according to 7.4 .....	68
H.1	General .....	68
H.2	Procedure .....	68
Annex I (informative)	Marking the temperature setting for checking the oven temperature .....	69
Bibliography	.....	70
Figure 1	– Position of the thermocouple for measuring ambient temperature .....	12
Figure 2	– Dimensions of appliances .....	15
Figure 3	– Dimensions of built-in appliances .....	16
Figure 4	– Usable internal dimensions .....	17
Figure 5	– Gauge for measuring these dimensions .....	17
Figure 6	– Device for checking the level of shelves .....	20
Figure 7	– Example of a thermocouple for the test of 7.4 .....	23
Figure 8	– Shape of the nozzle for extruding pastry .....	29
Figure 9	– Position of pastry strips on the baking sheet .....	30
Figure 10	– Convex colour sample .....	35
Figure 11	– Template for the sectioning of small cakes .....	35
Figure 12	– Reference values of cooking time ( $t_{ref}$ ) .....	48
Figure A.1	– Colour measuring instrument .....	53
Figure D.1	– Position of the thermocouples .....	61
Figure G.1	– Phases of energy consumption measurement – Example .....	66
Figure H.1	– Filament lamp .....	68
Figure I.1	– Polar coordinate paper – Example .....	69
Table 1	– settings .....	25
Table 2	– Ingredients .....	31



Table B.1 – Classification of shade numbers .....	54
Table B.2 – Examples for the shade charts.....	54
Table C.1 – Ingredient specification .....	56
Table C.2 – Food mixer – Revolutions.....	58
Table C.3 – Mixing time and setting.....	58
Table F.1 – Specification of relevant green shade charts .....	64

# INTERNATIONAL ELECTROTECHNICAL COMMISSION

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## HOUSEHOLD ELECTRIC COOKING APPLIANCES –

### Part 1: Ranges, ovens, steam ovens and grills – Methods for measuring performance

#### FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. 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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International Standard IEC 60350-1 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 2011. This edition constitutes a technical revision.

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

- new definitions for "**set to off mode**" and "**set to standby mode**" are included in Clause 3;
- reference to ISO 80000 regarding rounding;
- more exact determination of the mass of the appliances (6.2);
- update of the existing 7.3 in order to improve the clarity of procedure;

- additional temperature requirement in 7.4.3 to ensure an adequate temperature setting during the energy measurement process;
- editorial changes in 7.6.1.3, 7.6.2.1, 7.6.2.2 and 7.6.2.3;
- revision of Clause 8 in order to increase the repeatability for the measurements for steam ovens;
- Clause 12 "Standby power" is renamed to "Consumption measurement of low power modes" and the content is adapted for IEC 62301:2011;
- replacing the supplier for the colouring measurement device in Clause C.6, because the previous device is no longer available;
- adaptation of Annex A to the new supplier of colouring measurement devices;
- adaptation of Annex E;
- measurement method for measuring the consumption of the **cooling down period** is added in the informative, new Annex G;
- measurement method to check applied microwave energy during the measurement according to 7.4 is added in the informative Annex H;
- new Annex I for marking the temperature setting for checking the oven temperature.

This publication contains an attached file in the form of an Excel 97 file. This file is intended to be used as a complement and does not form an integral part of the publication.

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

FDIS	Report on voting
59K/273/FDIS	59K/277/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.

Words in **bold** in the text are specifically defined in Clause 3.

A list of all parts in the IEC 60350 series, published under the general title *Household electric cooking appliances*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability 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.

**IMPORTANT – The “colour inside” logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this publication using a colour printer.**

## HOUSEHOLD ELECTRIC COOKING APPLIANCES –

### Part 1: Ranges, ovens, steam ovens and grills – Methods for measuring performance

#### 1 Scope

This part of IEC 60350 specifies methods for measuring the performance of electric **cooking ranges, ovens, steam ovens, and grills** for household use.

The **ovens** covered by this standard may be with or without microwave function.

Manufacturers should define the primary cooking function of the appliance – microwave function or thermal heat. The primary cooking function should be measured with an existing method according to energy consumption. If the primary cooking function is declared in the instruction manual as a microwave function, IEC 60705 is applied for energy consumption measurement. If the primary cooking function is declared as a thermal heat, then IEC 60350-1 is applied for energy consumption measurement.

If the primary function is not declared by the manufacturer, the performance of the microwave function and thermal heat should be measured as far as it is possible.

NOTE 1 For measurement of energy consumption and time for heating a load (see 7.4), this standard is furthermore not applicable to:

- microwave combination function;
- ovens with reciprocating trays or turntable;
- small cavity ovens;
- ovens without adjustable temperature control;
- heating functions other than defined in 3.12 to 3.14;
- appliances with only solo **steam function** (3.15).

NOTE 2 This standard does not apply to

- microwave ovens (IEC 60705),
- portable appliances for cooking, grilling, steaming and similar functions (IEC 61817).

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

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

NOTE 3 Some of the tests which are specified in this standard are not considered to be reproducible since the results may vary between laboratories. They are therefore intended for comparative testing purposes only.

NOTE 4 This standard does not deal with safety requirements (IEC 60335-2-6 and IEC 60335-2-9).

NOTE 5 Appliances covered by this standard may be built-in or for placing on a working surface or the floor.

NOTE 6 There is no measurement method for the energy consumption for grilling and **steam functions** available.

#### 2 Normative references

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.

IEC 60584-2, *Thermocouples – Part 2: Tolerances*

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

ISO 80000-1:2009, *Quantities and units – Part 1: General*

CIE 15, *Colorimetry*