

**Kodumajapidamises kasutatavad elektrilised  
toiduvalmistusseadmed. Osa 2: Pliidiplaadid. Toimivuse  
mõõtemetodid**

**Household electric cooking appliances - Part 2: Hobs -  
Methods for measuring performance (IEC 60350-2:2011,  
modified)**

## EESTI STANDARDI EESSÕNA

See Eesti standard EVS-EN 60350-2:2013 sisaldab Euroopa standardi EN 60350-2:2013 ingliskeelset teksti.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 05.07.2013.

Standard on kättesaadav Eesti Standardikeskusest.

## NATIONAL FOREWORD

This Estonian standard EVS-EN 60350-2:2013 consists of the English text of the European standard EN 60350-2:2013.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.

Date of Availability of the European standard is 05.07.2013.

The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee).

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Hausgebrauch -  
Teil 2: Kochmulden -  
Verfahren zur Messung der  
Gebrauchseigenschaften  
(IEC 60350-2:2011, modifiziert)

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**CENELEC**

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

This document (EN 60350-2:2013) consists of the text of IEC 60350-2:2011 prepared by IEC/SC 59K "Ovens and microwave ovens, cooking ranges and similar appliances", of IEC/TC 59 "Performance of household and similar electrical appliances", together with the common modifications 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 (dop) 2014-06-03  
at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting (dow) 2016-06-03  
with this document have to be withdrawn

Together with EN 60350-1:2013, this document will supersede EN 50304:2009/EN 60350:2009 + A1:2010/A11:2010.

EN 60350-2:2013 includes the following significant technical changes with respect to EN 50304:2009/EN 60350:2009:

- 1) a method to measure energy consumption of hobs
  - a) that is representative for a real cooking process, for which after the heat up phase a simmering phase has been implemented in the measurement. Water as a standardised load is used. Food is theoretically considered in the experimental setup but not used as that leads to insufficient reproducibility. The ranking between the technologies will not be changed by different methods/applications, so the energy consumption is measured only by one energy optimised method.
  - b) that is applicable to compare different electrically heated technologies like e.g. induction, radiant or solid plates
  - c) that leads not to a comparison with gas burners. Gas hobs are covered by EN 30-2-1.
  - d) that fulfil requirements of repeatability and reproducibility (crucial for energy measuring purposes). Therefore the cooking process is defined on the temperature level 90 °C to avoid influence on the boiling point by ambient pressure.
  - e) that is applicable for hobs with different layouts and **cooking zone** / area sizes.

This method is based on the method described in TC59X/217/DC.

- 2) definition of cooking areas:

Following new market trends a definition for cooking areas is given. A definition is necessary as cooking areas have other demands e.g. for positioning the cookware or selecting the cookware sizes than **cooking zones**.

- 3) definition of standardised cookware also for big **cooking zone** sizes:

For a high reproducibility a standardised cookware shall be used. Therefore a self made cookware is defined up to a size of 330 mm bottom diameter. Evaporating water by holes in the lid simulates a cooking process on a higher temperature level. The thermal energy which is needed to keep at boiling point for a real cooking process including evaporation and the energy uptake of the food during the simmering phase is considered by the holes.

- 4) additional requirements (according to EN 50564) how to measure low power modes.

5) under consideration:

A control procedures for checking measured values in comparison to values declared by the manufacturer under consideration of permitted tolerances. WG10 with the support and sponsorship of CECED believes that it is fundamental to proceed with a Round Robin Test procedure of this draft amendment to confirm requirements of repeatability and reproducibility and to estimate the standard deviation of the method itself.

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 60350-2:2011 are prefixed "Z".

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

According to the decision D137/061 for CLC/TC 59X, this European Standard has been drawn up as a document which follows, as far as suitable, the structure of IEC 60350-2:2011.

It also describes the evaluation of data declared by the manufacturer and control procedures for checking these values.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

This European Standard is suitable for direct comparison and is considered sufficiently reproducible within given limits for the purpose of setting the ecodesign requirements for hobs according to the Directive ERP 2009/125/EC.

## Endorsement notice

The text of the International Standard IEC 60350-2:2011 was approved by CENELEC as a European Standard with agreed common modifications.

### COMMON MODIFICATIONS

#### General

**Replace all “hotplates” by “cooking zones” except “solid hotplates” and “tubular hotplates”.**

## 2 Normative references

**Replace IEC 62301:2005 by**

EN 50564:2011, *Electrical and electronic household and office equipment – Measurement of low power consumption (IEC 62301:2011, mod.)*

**Add the following references:**

HD 60364-5-54, *Low-voltage electrical installations – Part 5-54: Selection and erection of electrical equipment – Earthing arrangements and protective conductors (IEC 60364-5-54)*

EN ISO 80000-1:2013, *Quantities and units – Part 1: General (ISO 80000-1:2009 + Cor 1:2011)*

EN 10088-2, *Stainless steels — Part 2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes*

## 3 Terms and definitions

**Replace definitions 3.2 and 3.3 by:**

### 3.2

#### **hob**

appliance or part of an appliance which incorporates one or more **cooking zones** and/or **cooking areas** including a **control** unit

Note 1 to entry: A **hob** is also known as a cooktop.

Note 2 to entry: The **control** unit can be included in the **hob** itself or integrated in a **cooking range**.

### 3.3

#### **cooking zone**

**cooking zone** has limitative markings on the surface of a **hob** or attached to it where cookware is placed and heated

Note 1 to entry: **Cooking zones** which are used without cookware but by positioning the food directly on the surface are not included.

Note 2 to entry: A **cooking zone** can be

- **single zone and multiple zones** (see 3.3.Z1);
- **a solid hotplate** (see 3.3.Z2);
- **a tubular hotplate** (see 3.3.Z3);
- **a radiant cooking zone** (see 3.3.Z4);
- **a induction cooking zone** (see 3.3.Z5).