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Measurement method for assessing the compatibility of induction hob and cookware

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This standard includes the English version of the European Standard.

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English Version

## Measurement method for assessing the compatibility of induction hob and cookware

Méthode de mesure pour évaluer la compatibilité des tables de cuisson et des ustensiles de cuisine

Messmethode zur Bewertung der Kompatibilität von Induktionskochfeldern und Kochgeschirr

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## European foreword

This document EN 50723:2023 has been prepared by CLC/TC 59X “Performance of household and similar electrical cooking 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) 2024-07-24
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2026-07-24

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**EN 50723:2023 (E)****Introduction**

To ensure that induction hobs designed by household industry and cookware designed by cookware manufacturers are compatible a common platform for future innovations on both sides is needed. This document provides measurements to assess the compatibility / interoperability within the system cooking.

Manufacturers of cookware and hobs can use the measurements to identify various properties of induction hobs and cookware.

Standards application business, e.g. testing laboratories, can use this document for product test clearly to identify the compatibility of cookware and induction hobs.

Finally, the consumer benefit is on the one hand a better-harmonized product range (cookware/hob) and on the other hand, a clear product information regarding compatibility based on a standardized method.

## 1 Scope

This document describes a method which determines the electrical parameters for **compatibility** of cookware and induction hobs for household use. Cookware is an integral part of the cooking system; electrical parameters can affect the cooking process regarding the required power setting, speed of heating up, sufficient power for different cooking processes etc.

For determining the compatibility of a cookware to an induction cooking zone and cooking area, a measurement device and a measurement procedure is specified in this document. It allows measuring the resistivity and/or impedance of the cookware under test (**CUT**) in a repeatable and reproducible way. The measured electric properties indicate the compatibility characteristics of a cookware on an induction cooking zones and cooking area.

For determination the compatibility of an induction cooking zone or cooking area with a cookware, this document describes the measurement how to determine the power generated by the **cooking zone under test (ZUT)** in combination with the selected cookware.

NOTE 1 For definitions of induction hob, induction cooking zone and cooking area EN 60350-2 is relevant.

Further performance characteristics of hobs which are of interest to the user, like energy consumption, heating up time or heat distribution are not addressed. This document does not deal with safety requirements.

NOTE 2 Further performance characteristics for hobs are covered in EN 60350-2.

NOTE 3 Further performance characteristics for cookware are covered in EN 12983-1 and EN 12983-2.

NOTE 4 Safety requirements are covered in IEC 60335-2-6 and IEC 60335-2-9.

Appliances covered by this document can be built-in or portable induction hobs. The hob can also be a part of a cooking range.

## 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.

EN ISO 80000-1:2022, *Quantities and units — Part 1: General (ISO 80000-1:2022)*

EN 60350-2:2018, *Household electric cooking appliances — Part 2: Hobs — Methods for measuring performance*

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