

STN	Plynové sorpčné zariadenia na vykurovanie a/alebo chladenie s menovitým tepelným príkonom najviac 70 kW Časť 6: Výpočet sezónnej výkonnosti	STN EN 12309-6 06 1520
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Gas-fired sorption appliances for heating and/or cooling with a net heat input not exceeding 70 kW - Part 6: Calculation of seasonal performances

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/25

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EN 12309-6

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Supersedes EN 12309-6:2014

English Version

**Gas-fired sorption appliances for heating and/or cooling
with a net heat input not exceeding 70 kW - Part 6:
Calculation of seasonal performances**

Appareils à sorption fonctionnant au gaz pour le chauffage et/ou le refroidissement de débit calorifique sur PCI inférieur ou égal à 70 kW - Partie 6 : Calcul des performances saisonnières

Gasbefeuerte Sorptions-Geräte für Heizung und/oder Kühlung mit einer Nennwärmebelastung nicht über 70 kW - Teil 6: Berechnung der saisonalen Effizienzkennzahlen

This European Standard was approved by CEN on 24 February 2025.

CEN 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 CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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EN 12309-6:2025 (E)

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EN 12309-6:2025 (E)**European foreword**

This document (EN 12309-6:2025) has been prepared by Technical Committee CEN/TC 299 “Gas-fired sorption appliances, indirect fired sorption appliances, gas-fired endothermic engine heat pumps and domestic gas-fired washing and drying appliances”, the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2025, and conflicting national standards shall be withdrawn at the latest by October 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12309-6:2014.

EN 12309-6:2025 includes the following significant technical changes with respect to EN 12309-6:2014:

- terminology has been aligned to Commission Regulation (EU) No 813/2013 of 2 August 2013 and Commission Delegated Regulation (EU) No 811/2013 of 18 February 2013;
- heating temperature profile 45 °C has been eliminated;
- optional testing points have been added.

This document comprises parts under the general title, *Gas-fired sorption appliances for heating and/or cooling with a net heat input not exceeding 70 kW*. A list of all parts in a series can be found on the CEN website.

This document will be reviewed whenever new mandates could apply.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annexes ZA and ZB, which are integral parts of this document.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

1 Scope

1.1 Scope of EN 12309

Appliances covered by this document include one or a combination of the following:

- gas-fired sorption chiller;
- gas-fired sorption chiller/heater;
- gas-fired sorption heat pump.

This document applies to appliances designed to be used for space heating or cooling or refrigeration with or without heat recovery.

This document applies to appliances having flue gas systems of Type B and Type C (according to EN 1749:2020) and to appliances designed for outdoor installations, including Type A. EN 12309 does not apply to air conditioners, it only applies to appliances having:

- integral burners under the control of fully automatic burner control systems,
- closed system refrigerant circuits in which the refrigerant does not come into direct contact with the water or air to be cooled or heated,
- mechanical means to assist transportation of the combustion air and/or the flue gas.

The above appliances can have one or more primary or secondary functions (i.e. heat recovery - see definitions in EN 12309-1:2023).

In the case of packaged units (consisting of several parts), this document applies only to those designed and supplied as a complete package.

The appliances having their condenser cooled by air and by the evaporation of external additional water are not covered by EN 12309.

Installations used for heating and/or cooling of industrial processes are not within the scope of EN 12309.

All the symbols given in this document are used regardless of the language used.

1.2 Scope of this Part 6 to EN 12309

This part of EN 12309 specifies the calculation methods of seasonal performances for gas-fired sorption appliances for heating and/or cooling with a net heat input not exceeding 70 kW. It deals in particular with the calculation methods of reference seasonal performances in cooling and heating mode for monovalent and bivalent appliances.

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 12309-1:2023, *Gas-fired sorption appliances for heating and/or cooling with a net heat input not exceeding 70 kW — Part 1: Terms and definitions*

EN 12309-3:2024, *Gas-fired sorption appliances for heating and/or cooling with a net heat input not exceeding 70 kW — Part 3: Requirements, test conditions and test methods*

EN 15502-1:2021+A1:2023, *Gas-fired heating boilers — Part 1: General requirements and tests*