



SLOVENSKI STANDARD
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**Toplotna črpalka s plinsko gnanim motorjem z notranjim zgorevanjem - 3. del:
Preskusni pogoji**

Gas-fired endothermic engine driven heat pumps - Part 3: Test conditions

Gasbefeuerte endothermische Motor-Wärmepumpen - Teil 3: Prüfbedingungen

Pompes à chaleur à moteur endothermique alimenté au gaz - Partie 3 : Conditions
d'essai

Ta slovenski standard je istoveten z: EN 16905-3:2024

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ICS:

27.080 Toplotne črpalke Heat pumps

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EUROPEAN STANDARD

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Gas-fired endothermic engine-driven heat pumps - Part 3: Test conditions

Pompes à chaleur à moteur endothermique alimenté
au gaz - Partie 3 : Conditions d'essai

Gasbefeuerte endothermische Motor-Wärmepumpen -
Teil 3: Prüfbedingungen

This European Standard was approved by CEN on 18 November 2024.

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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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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 16905-3:2024) 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of an identical text or by endorsement, at the latest by June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.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 16905-3:2017.

EN 16905-3:2024 includes the following significant technical changes with respect to EN 16905-3:2017:

- Tables 6; 8; 9; 10; 12; 13; 14: addition of test performed with fixed flow rate and variable flow rate;
- Tables 8; 9; 10; 12; 13; 14: modification of the term indicating temperature applications in heating;
- Table 6: addition of a new test conditions in case of brine = 10°C and brine = -5°C.

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.

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.

EN 16905-3:2024 (E)

Introduction

The GEHP appliances having their condenser cooled by air and by the evaporation of external additional water are not covered by this document.

Single split and multi-split systems are covered by this document.

The GEHP appliances can have one or more primary or secondary functions.

This document specifies the requirements, test methods and test conditions concerning, in particular, the construction, safety, fitness for purpose, and rational use of energy, for the rating and performance calculation of air conditioners and heat pumps using either air, water or brine as heat transfer media, with gas-fired endothermic engine driven compressors when used for space heating, cooling and refrigeration, hereafter referred to as “GEHP appliance”.

EN 16905 series comprises the following parts under the general title, Gas-fired endothermic engine driven heat pumps:

- Part 1: Terms and definitions;
- Part 2: Safety;
- Part 3: Tests conditions;
- Part 4: Tests methods;
- Part 5: Calculation of seasonal performances in heating and cooling mode.

This document has been prepared to address the test conditions.

EN 16905-1:2023, EN 16905-2:—¹, EN 16905-4:—² are linked to the Energy Related Products Directive (2009/125/EC) in terms of tests conditions, tests methods and seasonal performances calculation methods under Mandate M/535; (see EN 16905-4:—², Annex ZA and EN 16905-2:—¹ Annexes ZB and ZC).

These documents will be reviewed whenever new mandates could apply.

¹ To be published. Stage at the time of publication: FprEN 16905-2:2023.

² To be published. Stage at the time of publication: FprEN 16905-4:2023.