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Heat pump water heaters — Testing and rating for performance —

Part 1: Heat pump water heater for hot water supply

Chauffe-eau à pompe à chaleur — Essais et classification des performances —

Partie 1: Chauffe-eau à pompe à chaleur pour l'alimentation en eau chaude

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Contents

Page

Foreword ... **iv**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**

4 Symbols and abbreviated terms ... **3**

5 Installation requirements ... **5**
5.1 Test apparatus and uncertainties of measurement ... 5
5.2 Test room for the outdoor heat exchanger of air source heat pump water heaters ... 5
5.3 Installation and connection of the heat pump water heaters ... 6
5.4 Installation of heat pump water heater consisting of several parts ... 6

6 Settings and test conditions ... **6**
6.1 General ... 6
6.2 Settings for non-ducted air source units ... 6
6.3 Setting the external static pressure difference for ducted air source units ... 7
6.4 Test conditions ... 7
6.4.1 General test conditions ... 7
6.4.2 Additional test conditions ... 7

7 Performance test and determination of the energy consumption ... **9**
7.1 General ... 9
7.2 Basic principles ... 9
7.3 Off-peak products ... 10
7.4 Power input corrections ... 11
7.4.1 Power input of fans for heat pump water heater with duct connection ... 11
7.5 Stabilization [stage A] ... 12
7.6 Filling and storage [stage B] ... 12
7.7 Filling and heating up period [stage C] ... 12
7.8 Standby power input [stage D] ... 13
7.9 Water draw-offs and COP calculation [stage E] ... 13
7.9.1 Determination of the useful energy content ... 13
7.9.2 Determination of the energy consumption ... 15
7.9.3 Coefficient of performance (COP_{HW}) ... 16
7.10 Reference hot water temperature and volume of mixed water at 40 °C [stage F] ... 16
7.11 Units with smart control ... 17
7.12 Temperature operating range ... 17

8 Test results and test report ... **17**
8.1 Data to be recorded ... 17
8.2 Test report ... 18
8.2.1 General information ... 18
8.2.2 Main results ... 19

9 Marking ... **19**

Annex A (normative) **Load profiles** ... **20**

Annex B (informative) **Determination of the smart control factor SCF** ... **22**

Annex C (informative) **Temperature operating range** ... **28**

Bibliography ... **30**

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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A list of all parts in the ISO 19967 series can be found on the ISO website.

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Heat pump water heaters — Testing and rating for performance —

Part 1: Heat pump water heater for hot water supply

1 Scope

This document specifies test conditions and test procedures for determining the performance characteristics of air source heat pump water heaters for hot water supply with electrically driven compressors with or without supplementary electric heater and connected to or including only one hot water storage tank. Hot water storage tanks that are connected in series or parallel and behave hydronically as one single tank are considered as one hot water storage tank. In the case of heat pump water heaters consisting of several parts with refrigerant or water connections, this document applies only to those designed and supplied as a complete package.

NOTE This document is not applicable to testing procedures for simultaneous operation for hot water supply and space heating. "Simultaneous" means that hot water supply and space heating generation occur at the same time and may interact.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
heat pump water heater for hot water supply
air source heat pump water heater with electrically driven compressors with or without supplementary electrical heater and connected to or including a hot water storage tank for hot water supply for human use

3.2
hot water supply
water heated for human use or household or similar purposes

3.3
storage volume
V_m
measured volume of hot water that can be contained in the storage tank

3.4
non heated space air
heat source for a heat pump which absorbs heat by an air heat exchanger in direct contact with the air inside a space in a building which is not heated

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