
**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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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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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This document was prepared by Technical Committee ISO/TC 86, *Refrigeration and air-conditioning*, Subcommittee SC 6, *Testing and rating of air-conditioners and heat pumps*.

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