INTERNATIONAL STANDARD

ISO 13256-2

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Water-source heat pumps — Testing and rating for performance —

Part 2:
Water-to-water and brine-to-water heat pumps

Pompes à chaleur à eau — Essais et détermination des caractéristiques de performance —

Partie 2: Pompes à chaleur eau-eau et eau glycolée-eau

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Contents

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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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

This part of ISO 13256 was developed by ISO Technical Committee TC 86, *Refrigeration*, Subcommittee SC 6, *Testing and rating of air-conditioners and heat pumps*.

ISO 13256 consists of the following parts, under the general title *Water-source heat pumps — Testing and rating for performance*:

— *Part 1: Water-to-air and brine-to-air heat pumps*

— *Part 2: Water-to-water and brine-to-water heat pumps*

Annexes A and B form an integral part of this part of ISO 13256. Annexes C and D are for information only.

Introduction

This part of ISO 13256 covers heating and cooling systems which are generally referred to as "water-source heat pumps." These systems generally include an indoor coil with air-moving means, a compressor, and a refrigerant-to-water or refrigerant-to-brine heat exchanger. A system may provide both heating and cooling, cooling-only, or heating-only functions.

Water-source heat pumps — Testing and rating for performance — Part 2: Water-to-water and brine-to-water heat pumps

1 Scope

1.1 This part of ISO 13256 establishes performance testing and rating criteria for factory-made residential, commercial and industrial, electrically driven, mechanical-compression type, water-to-water and brine-to-water heat pumps. The requirements for testing and rating contained in this part of ISO 13256 are based on the use of matched assemblies.

1.2 Equipment designed for rating at one application under this part of ISO 13256 may not be suitable for rating at all applications covered in this part of ISO 13256.

1.3 This part of ISO 13256 does not apply to the testing and rating of individual assemblies for separate use or to units having two or more indoor sections connected to a single outdoor section. It does not apply to heat pumps covered in ISO 5151, ISO 13253 or ISO13256-1.

NOTE — For the purpose of the remaining clauses, the terms "equipment" or "heat pump" may be used to mean "water-to-water heat pumps" or brine-to-water heat pumps", and the term "liquid" refers to either "water" or "brine."

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 13256. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 13256 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 817:—[1)], *Refrigerants — Number designation.*

3 Definitions

For the purposes of this part of ISO 13256, the following definitions apply.

3.1
water-to-water and brine-to-water heat pump
heat pump which consists of one or more factory-made assemblies which normally include an indoor-side refrigerant-to-water heat exchanger, compressor(s), and an outdoor-side refrigerant-to-water or refrigerant-to-brine heat exchanger(s), including means to indirectly provide both cooling and heating, cooling-only, or heating-only functions

NOTES

1 When such equipment is provided in more than one assembly, the separated assemblies should be designed to be used together.

2 Such equipment may also provide functions for sanitary water heating.

1) To be published. (Revision of ISO 817:1974)