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**Heat pump water heater for commercial and industrial and
similar application
(English Translation)**

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Foreword

The Annex B of this Standard is a normative annex, and Annex A is an informative annex.

This Standard was proposed by the China Machinery Industry Federation.

This Standard shall be under the jurisdiction of National Technical Committee for Standardization of Refrigeration and Air Conditioning Equipment (SAC/TC 238).

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This Standard shall be interpreted by the National Technical Committee for Standardization of Refrigeration and Air Conditioning Equipment.

This Standard was first-time formulated.

Heat pump water heater for commercial & industrial and similar application

1 Scope

This Standard specifies the terms and definitions, types and basic parameters, requirements, test methods, inspection rules, marking, packaging, storage and transportation of heat pump water heater for commercial and industrial and similar application (hereinafter referred to as "water heater").

This Standard is applicable to the motor-driven air-source and water-source heat pump water heaters for hot water supply, with vapor compression refrigeration cycle, and a nominal heating capacity of 3,000W or more. For the heat pump water heaters for other purposes, it can also be used for reference.

2 Normative references

The provisions in the following documents become the provisions of this Standard through reference in this Standard. For dated references, the subsequent amendments (excluding corrections) or revisions do not apply to this Standard. However, parties who reach an agreement based on this Standard are encouraged to study if the latest editions of these documents are applicable. For undated references, the latest editions apply to this Standard.

GB/T 191 Packaging -- Pictorial marking for handling of goods (GB/T 191-2000, eqv ISO 780.1997)

GB/T 1720 Method of test for adhesion of paint films

GB/T 2423.17 Basic environmental testing procedures for electric and electronic products -- Test Ka. Salt mist (GB/T 2423.17-1999, eqv IEC 60068-2-11.1981)

GB/T 2828.1 Sampling procedures for inspection by attribute -- Part 1. Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection (GB/T 2828.1-2003, ISO 2859.1999 IDT)

GB/T 6388 Transport package shipping mark

GB 8624 Classification for burning behavior of building materials and products

GB/T 10870-2001 The methods of performance test for positive displacement & centrifugal water-chilling units and heat pump

GB/T 13306 Plates

GB/T 13384 General specifications for packing of mechanical and electrical product

GB/T 17758 Unitary air conditioners

GB/T 18430.1 Water chilling (heat pump) packages using the vapor compression cycle -- Part 1. Water chilling (heat pump) packages for industrial & commercial and similar application

JB/T 4330 Determination of noise emitted by refrigerating and air condition

JB/T 4750 Pressure vessels for refrigerant equipment

JB/T 7249 Terminology of refrigeration equipment

JB 8654 Safety requirements of positive displacement and centrifugal water-chilling packages

3 Terms and definitions

The terms and definitions established by JB/T 7249 and the following ones are applicable to this Standard.

3.1 Heat pump water heater

A motor-driven device that uses vapor compression refrigeration cycle to transfer heat from a low-grade heat source (air or water) to heated water for making hot water.

3.2 Air-source heat pump water heater

A heat pump water heater that uses air as the heat source.

3.3 Water-source heat pump water heater

A heat pump water heater that uses water as a direct heat source or as a heat transfer medium to transfer heat.

3.4 One-time heating heat pump water heater

A water heater that uses side-feed water to flow through the heat pump water heater to reach the set termination temperature at one time.

materials shall be non-toxic, non-odor and non-flammable materials, and shall meet the requirements of GB 8624.

5.1.10 When water inlet and outlet pipes of the water heater's pressure-resistant water tank are directly installed in the public water supply system, the water inlet and outlet pipes shall comply with the requirements of the relevant national water pipe connector standards.