GB 30721-2014

Translated English of Chinese Standard: GB 30721-2014 www.ChineseStandard.net

Sales@ChineseStandard.net

GB

ICS 27.010 F 01

## National Standard of the People's Republic of China

GB 30721-2014

# Minimum allowable values of energy efficiency and energy efficiency grades for water-source (ground-source) heat pumps

#### GB 30721-2014 How to BUY & immediately GET a full-copy of this standard?

- www.ChineseStandard.net;
- Search --> Add to Cart --> Checkout (3-steps);
- 3. No action is required Full-copy of this standard will be automatically & immediately delivered to your EMAIL address in  $0^25$  minutes.
- Support: Sales@ChineseStandard.net. Wayne, Sales manager

Issued on: June 9, 2014 Implemented on: April 1, 2014

Issued by: General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China;

Standardization Administration Committee of the People's Republic of China.

### **Table of Contents**

Foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Technical requirements	5
5 Test methods	6
6 Inspection rules	6
7 Labeling of energy efficiency grades	7

GB 30721-2014

#### **Foreword**

4.3 of this Standard is mandatory, the rest are recommended.

This Standard was drafted according to the rules given by GB/T 1.1-2009.

This Standard was proposed by the Resources Conservation and Environmental Protection Department of the National Development and Reform Commission, and the Energy Saving and Comprehensive Utilization Department of the Ministry of Industry and Information Technology.

This Standard shall be under the jurisdiction of the National Energy Foundation and Management Standardization Technical Committee (SAC/TC 20).

Drafting organizations of this Standard: Hefei General Machinery Research Institute, China National Institute of Standardization, Vicki (Zhejiang) Air Conditioning Equipment Co., Ltd., Shenzhen McQuay Air Conditioning Co., Johnson Controls Building Equipment Technology (Wuxi) Co., Ltd., Shandong Fulda Air Conditioning Equipment Co., Ltd., Shandong Fulda Air Conditioning Equipment Co., Ltd., Shandong Hongli Air Conditioning Equipment Co., Ltd., Ningbo WaterFurnace Shenglong HVACR Climate Solutions Co., Ltd., Zhejiang Dun'an Electrical Technology Co., Ltd., Nanjing TICA Air Conditioning Equipment Co., Ltd., Trane Air Conditioning Systems (China) Co., Ltd., Lotus Air Conditioning (Jiangsu) Co., Ltd., Guangdong OAK Air Conditioning Refrigeration Co., Ltd., and Hefei General Machinery and Electronic Products Inspection Institute.

Main drafters of this Standard: Cheng Jianhong, Zhang Mingsheng, Peng Fei, Zhong Yu, Wang Daijie, Cai Yongjian, Hu Xianghua, Gao Chong, Ling Hong, Ge Jianmin, Dong Yunda, Li Jianjun, Cheng Zhuoming, Zhang Weijia, Chen Zhaohui, and Chen Jun.

# Minimum allowable values of energy efficiency and energy efficiency grades for water-source (ground-source) heat pumps

#### 1 Scope

This Standard specifies the minimum allowable values of energy efficiency, evaluation values of energy conservation, energy efficiency grades, test methods, and inspection rules for water-source (ground-source) heat pumps.

This Standard applies to the water-source (ground-source) heat pumps of household, commercial and industrial uses, and other similar uses that use electrical and mechanical compression systems and use water as cold (hot) source.

This Standard does not apply to cooling-only-type and heating-only-type water-source (ground-source) heat pumps.

#### 2 Normative references

The following documents are essential for the application of this document. For dated references, only dated edition applies to this document. For undated references, the latest edition (including all amendments) applies.

GB/T 19409 Water-source (ground-source) heat pumps

#### 3 Terms and definitions

The terms and definitions defined in GB/T 19409 AND the following terms and definitions apply to this document.

3.1

Annual coefficient of performance for water-source (ground-source) heat pumps; ACOP

The annual coefficient of performance obtained by comprehensively WEIGHTING the efficiency for water-source (ground-source) heat pumps when operating at full-load under nominal cooling conditions and nominal heating conditions WITH several office

GB 30721-2014

### 7 Labeling of energy efficiency grades

Manufacturers shall determine the energy efficiency grades for water-source (ground-source) heat pumps according to the requirements and the test results of this Standard.

Manufacturers shall indicate the energy efficiency grades for water-source (ground-source) heat pumps and the standard number it bases in the factory-exit documents of products.

#### This is an excerpt of the PDF (Some pages are marked off intentionally)

#### Full-copy PDF can be purchased from 1 of 2 websites:

#### 1. https://www.ChineseStandard.us

- SEARCH the standard ID, such as GB 4943.1-2022.
- Select your country (currency), for example: USA (USD); Germany (Euro).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Tax invoice can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with download links).

#### 2. <a href="https://www.ChineseStandard.net">https://www.ChineseStandard.net</a>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Add to cart. Only accept USD (other currencies https://www.ChineseStandard.us).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with PDFs attached, invoice and download links).

Translated by: Field Test Asia Pte. Ltd. (Incorporated & taxed in Singapore. Tax ID: 201302277C)

About Us (Goodwill, Policies, Fair Trading...): <a href="https://www.chinesestandard.net/AboutUs.aspx">https://www.chinesestandard.net/AboutUs.aspx</a>

Contact: Wayne Zheng, Sales@ChineseStandard.net

Linkin: <a href="https://www.linkedin.com/in/waynezhengwenrui/">https://www.linkedin.com/in/waynezhengwenrui/</a>

---- The End -----