

ICS 91.140.30

CCS P 48



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 34012-2017

Air cleaners for ventilation systems

通风系统用空气净化装置

Issued on: July 12, 2017

Implemented on: June 1, 2018

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine;
Standardization Administration of the PRC**

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Foreword

This standard is drafted in accordance with the rules given in GB/T 1.1-2009. This standard is proposed by the Ministry of Housing and Urban and Rural Development of the People's Republic of China. This standard by the National HVAC and purification equipment Standardization Technical Committee (SAC/TC143) centralized. This standard is responsible for drafting units. China Academy of Building Research. This standard participates in the drafting unit. Tsinghua University, Shanghai Institute of Building Science (Group) Co., Ltd., China Center for Disease Control and Prevention Environmental and Health Related Products Safety, Beijing University of Architecture, Chongqing University, Guangdong Institute of Microbiology, Beijing Urban Construction Design and Development Group Co., Ltd., Zhejiang Manrui De Environmental Technology Co., Ltd., Daikin (China) Investment Co., Ltd. Shanghai Branch, Nantong Hengjia Environmental Protection Technology Co., Ltd., Guangdong Matsushita Environmental System Co., Ltd., Shanghai Lanshe Air Technology Co., Ltd., Shenzhen Electric Jing Technology Co., Ltd. Debao Bao Ling Nonwovens (Suzhou) Co., Ltd., Zhuhai Gree Electric Co., Ltd., Guangdong Shenling Environmental System Co., Ltd., Jiang Sufeng God Air Conditioning Group Co., Ltd., Yantai Baoyuan Purification Co., Ltd., Great Clean Air Technology Co., Ltd., He's (Suzhou) special Material Co., Ltd., Ningbo Dongda Air Conditioning Equipment Co., Ltd., the United States and China (China) Environmental Purification Co., Ltd., Johnson Controls building equipment technology (no Tin) Co., Ltd., Anhui Bing Ken Electric Co., Ltd., Beijing Hengtong Green Energy Technology Co., Ltd., Beijing Central are artificial environmental technology limited company Division, Beijing Yadu Environmental Protection Technology Co., Ltd., Texas Aho Filter Equipment Co., Ltd., Shanghai Shengjie Air Purification Equipment Co., Ltd., Dongguan City Yujie New Material Co., Ltd., Ningbo Ai Pu Luo Environmental Technology Co., Ltd., love core environmental technology (Xiamen) Co., Ltd., Shanxi Xinhua (Shanghai) Indoor Air Technology Co., Ltd., Ai You special air technology (Shanghai) Co., Ltd., Shenzhen Ze wind net Chemical Equipment Co., Ltd., Chongqing Hairun Energy Saving Technology Co., Ltd. The main drafters of this standard. Lubin, Sun Zhifeng, Xu Zhaowei, Feng Xin, Zhang Yinping, Li Jingguang, Lu Xifang, Gao Yan, Ding Yong, Xie Xiaobao, Zhang Liang, Cao Guogong, Li Jiandong, Zhang Yanuo, Wang Zhiyong, Meng Chong, Shi Ying, Chen Wei, Zhang Jianqiang, Ni Niu, Zhang Jiarong, Zhu

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1 Scope

China's national standard for air cleaning equipment used in ventilation and air conditioning systems. It specifies the terms and definitions, the classification and marking, the general requirements, the test methods, the inspection rules and the marking, packaging, transport and storage, and it applies to the manufacture and inspection of air purification equipment for ventilation and air conditioning. It was written into a particular moment: the severe urban particulate episodes of the 2010s made indoor air quality a mass concern in China, and air cleaning went from a specialist product for cleanrooms and hospitals to something fitted in offices, schools and homes. That expansion brought claims with it - percentages of removal, coverage areas, purification efficiencies - quoted without a stated test method and therefore without meaning. A standard that fixes how efficiency is measured, at what airflow, against what challenge, and how the result is expressed is what makes two products comparable, and it is the only defence a purchaser has against a number chosen by a marketing department.

This standard specifies the terms and definitions, classification and marking of general purpose, requirements, test methods for air purification systems for ventilation systems. Inspection rules and signs, packaging, transportation and storage. This standard applies to the production and inspection of air purification equipment for ventilation and air conditioning systems.

2 Normative reference documents

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

GB/T 191 packaging and storage icon General rules for the packing of household and similar electrical appliances GB/T

GB/T 2828.1 Sampling inspection procedures Part 1. Batch inspection sampling plan for retrieval by quality limit (AQL) Safety of household and similar electrical appliances - Part 1. General requirements

GB 4706.1 Particular requirements for safety air cleaners for household and similar electrical appliances GB 4706.45 GB/T 13306 signs

GB/T 13554 High efficiency air filter GB/T 14295 air filter

GB/T 18883 Indoor air quality standards Air - air energy recovery unit GB/T

GB 21551.3 Special requirements for air purifiers for antimicrobial, sterilization and purification of household and similar electrical appliances Code for acceptance of construction quality of ventilation and air conditioning engineering

GB 50243 JJG846 dust concentration measuring instrument Technical specification for disinfection of medical institutions Technical Code for Disinfection (2002) Ministry of Health of the People's Republic of China

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 A device that has a certain ability to remove air contaminants from air in the ventilation system.

3.2 Air pollutants airpollutants A substance that adversely affects the human body or the environment. Including particulate matter, gaseous pollutants, microorganisms and other pollutants.

3.3 Respirable particulate matter (particle size less than or equal to 10µm) inhalableparticulatematter (PM10) The aerodynamically equivalent particles of less than or equal to 10 µm in ambient air.