

Translated English of Chinese Standard: GB/T32049-2015

www.ChineseStandard.net → Buy True-PDF → Auto-delivery.

Sales@ChineseStandard.net

GB

NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA

ICS 27.010

F 01

GB/T 32049-2015

**Minimum allowable values of energy efficiency and
energy efficiency grades for household and similar
purposes A.C. electric ventilating fans**

家用和类似用途交流换气扇能效限定值及能效等级

Issued on: September 18, 2015

Implemented on: October 01, 2016

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

Table of Contents

Foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions.....	5
4 Technical requirements.....	5
5 Test method	8
6 Inspection rules	9
7 Energy efficiency grade marking	9

Minimum allowable values of energy efficiency and energy efficiency grades for household and similar purposes A.C. electric ventilating fans

1 Scope

This Standard specifies the minimum allowable values, energy efficiency grades, evaluating values of energy conservation, test methods, inspection rules and energy efficiency grade marking for household and similar purposes A.C. electric ventilating fans (hereinafter referred to as ventilating fans).

This Standard is applicable to AC motor-driven ventilating fans, of which the single-phase rated voltage is not more than 250 V, the rated input power not more than 500 W, and the impeller diameter is not more than 500 mm.

This Standard does not apply to ventilating fans for the following purposes:

- a) ventilating fans that are specially designed for industrial use;
- b) ventilating fans that are intended for use in special conditions, such as places where there are corrosive, flammable, explosive gases, dust, steam or coal gas;
- c) ventilating fans for air heaters, freezers or air conditioners and air-to-air energy recovery devices;
- d) ventilating fans that are embedded in appliances such as stoves and microwave cooking appliances;
- e) marine ventilating fans;
- f) type-C ventilating fans, two-way air-out fans, and type-B and type-D ventilating fans of which the maximum static pressure is less than 25 Pa.

2 Normative references

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

GB/T 1236, Industrial fan. Performance testing using standardized airways

GB/T 2828.1, Sampling procedures for inspection by attributes. Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

GB/T 2829, Sampling procedures and tables for periodic inspection by attributes (apply to inspection of process stability)

GB/T 14806, A.C. electric ventilating fans and regulators for household and similar purposes

3 Terms and definitions

Terms and definitions determined by GB/T 14806 and the following ones are applicable to this document.

3.1 Energy efficiency values for ventilating fans

Under the standard test conditions, the ratio of the measured air volume of the ventilating fan to the measured input power of the fan blade drive motor, in cubic meters per watt [$\text{m}^3/(\text{min} \cdot \text{W})$].

3.2 Minimum allowable values of energy efficiency for ventilating fans

The minimum energy efficiency value for ventilating fans that is allowed under the standard test conditions, in cubic meters per watt [$\text{m}^3/(\text{min} \cdot \text{W})$].

3.3 Reach minimum allowable values of energy efficiency for ventilating fans

The minimum allowable values of energy efficiency for ventilating fans that is implemented after several years of implementation of this Standard.

3.4 Evaluating values of energy conservation for ventilating fans

The minimum energy efficiency index that an energy-conservation ventilating fan shall achieve under standard test conditions, in cubic meters per watt [$\text{m}^3/(\text{min} \cdot \text{W})$].

4 Technical requirements

4.1 Basic requirements

The performance of the ventilating fans to which this Standard applies shall comply with the requirements of GB/T 14806.

4.2 Energy efficiency grades for ventilating fans

requirements in GB/T 1236. If there is any dispute over the test results, test and determine according to the method that is specified in GB/T 1236.

6 Inspection rules

6.1 Delivery inspection

6.1.1 The inspection plan which refers to GB/T 2828.1 and GB/T 2829, shall be carried out by the manufacturer's quality inspection department in accordance with relevant enterprise standards.

6.1.2 Products whose energy efficiency values are recognized, through inspection, to be inconsistent with the requirements of 4.3 are not allowed to be delivered.

6.2 Type inspection

6.2.1 When any of the following conditions occurs, the type inspection of minimum allowable values shall be carried out:

- a) new products that are trial-produced;
- b) when the product design, process or used materials are changed to significantly affect its performance;
- c) when inspection requirements are put forward by the quality and technical supervision department.

6.2.2 For sampling of type inspection, 3 machines shall be sampled at a time, one for testing and two for standby application. If the test result does not meet the specified requirements, test the two standby samples; the measured values shall meet the specified requirements; otherwise, the batch of products shall be judged as unqualified.

7 Energy efficiency grade marking

7.1 The manufacturer shall determine the rated energy efficiency grades of the product in accordance with the requirements of this Standard and the test results.

7.2 The manufacturer shall indicate the rated energy efficiency grade of the product and the standard number on which it is based on the product documentation of its product.

_____ **END** _____

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. <https://www.ChineseStandard.net>

- 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...): <https://www.chinesestandard.net/AboutUs.aspx>

Contact: Wayne Zheng, Sales@ChineseStandard.net

Linkin: <https://www.linkedin.com/in/waynezhengwenrui/>

----- The End -----