

ICS 17.020
CCS A 50

JJF

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

JJF 1261.19-2017

Replacing JJF 1261.19-2015

**Rules of Metrology Testing for Energy Efficiency of AC Electric
Fans
(English Translation)**

Issued on: September 26, 2017

Implemented on: March 26, 2018

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine**

Table of Contents

Introduction (II)	
1 Scope (1)	
2 References (1)	
3 Terms and units of measure (1)	
3.1 Rated input power (1)	
3.2 Output Air Volume (1)	
3.3 AC fan energy efficiency (1)	
3.4 AC fan energy efficiency limit (1)	
3.5 Energy efficiency rating (1)	
4 Overview (2)	
5 Metrological requirements (2)	
5.1 Energy Efficiency Labelling (2)	
5.2 Energy Efficiency Index (Energy Consumption) (2)	
5.3 Energy efficiency rating (3)	
6 Testing Conditions (4)	
6.1 Environmental Conditions (4)	
6.2 Measuring Equipment (4)	
6.3 Measurement uncertainty (5)	
7 Testing Items and Methods (5)	
7.1 Sampling Principles and Methods (5)	
7.2 Sample Testing (5)	
7.3 Original records (6)	
7.4 Data Processing (6)	
8 Test Results (6)	
8.1 Eligibility Criteria for Energy Efficiency Index (Energy Consumption) Measurement Test Results (6)	
8.2 Test results assessment criteria (6)	
8.3 Test Report (7)	
Appendix A AC Fan Measurement Method (9)	
Appendix B Examples of Evaluation of Uncertainty in Measurement of AC Fan Energy Efficiency (15)	
Appendix C AC Fan Energy Efficiency Measurement Inspection Sample Sheet (Format) (22)	

Appendix D Original Record of AC Fan Energy Efficiency Measurement (Format) (23)

Appendix E AC Fan Energy Efficiency Measurement Test Report (Format) (26)

8 Test Results (6)

8.1

Eligibility Criteria for Energy Efficiency Index (Energy Consumption) Measurement Test Results (6)

8.3 Test Report (7)

Appendix A AC Fan Measurement Method (9)

Appendix B Examples of Evaluation of Uncertainty in Measurement of AC Fan Energy Efficiency (15)

Appendix C AC Fan Energy Efficiency Measurement Inspection Sample Sheet (Format) (22)

Appendix D Original Record of AC Fan Energy Efficiency Measurement (Format) (23)

Appendix E AC Fan Energy Efficiency Measurement Test Report (Format) (26)

Introduction

In order to standardize the energy efficiency measurement of AC fans implementing energy efficiency label management (hereinafter referred to as "fans") the inspection work is based on the requirements of JJF 1261.1-2017 Energy Efficiency Measurement and Detection Rules for Energy Products.

specification.

This specification replaces JJF 1261.19-2015, compared with JJF 1261.19-2015, except for editorial changes.

The main changes are as follows.

--- "5.1 Energy efficiency labeling" adds "energy efficiency information code" and "energy efficiency 'leader' information" and other requirements;

--- The original record format and test report format were revised accordingly (Appendix D, Appendix E).

The previous versions of this specification were issued as follows.

---JJF 1261.19-2015.

AC fan energy efficiency Metering detection rules

1 Scope

This specification stipulates the requirements for energy efficiency measurement and measurement of AC electric fans (hereinafter referred to as electric fans).

Sequence, measurement and measurement methods, measurement criteria, and test reports.

This specification applies to single phase rated voltage not exceeding 250V, other rated voltage not exceeding 480V, by alternating current Motive-driven metering supervision and inspection of energy-driven table fans, wall fans, table fans, floor fans, ceiling fans, and rotating pages the test can be carried out with reference to this specification. Units that manufacture and sell electric fans can also be tested in accordance with this specification.

The electric fan that is tested should be a product that the manufacturer has passed its own inspection, or it is a product imported or sold by the seller.

2 references

This specification refers to the following documents.

JJF 1261.1-2017 Energy Product Energy Efficiency Measurement Inspection Rules GB/T 2829-2002 Periodic Inspection Count Sampling Procedures and Tables (Applicable to Inspection of Process Stability) GB 4706.1-2005 Safety of household and similar electrical appliances Part 1. General requirements GB 12021.9-2008 AC fan energy efficiency limit and energy efficiency rating GB/T 13380-2007 AC fans and governors for dated references, only dated editions apply to this specification; all undated references the latest version (including all amendments) applies to this specification.

3 Terms and units of measure the following terms and units of measurement apply to this specification.

3.1 Rated input power P_{in} the input power specified by the manufacturer for the fan, measured in W.

3.2 Output air volume Q_v the amount of air output per minute when the fan operates at the rated voltage, rated frequency, and maximum speed.

The unit of measurement is m^3/min .

3.3 AC fan energy efficiency η for AC electric fans when measured at rated voltage, rated frequency and maximum speed, the measured output air volume is divided by the measured input power.

Rate, the unit of measurement is $m^3/(min \cdot W)$.

3.4 AC fan energy efficiency limit value

minimum allowable values of energy efficiency for AC electric fans this specification specifies the minimum allowable energy efficiency value of AC fans under test conditions, and the unit of measurement is $\text{m}^3/(\text{min} \cdot \text{W})$.

3.5 Energy efficiency grade energy efficiency grades A graded method of indicating the level of energy efficiency of AC fans, with the highest rating at Level 1 and Level 3 lowest.