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

GB/T 13467-2013

Replacing GB/T 13467-1992

**Measurement and calculation methods of electric energy
balance for fan system**

通风机系统电能平衡测试与计算方法

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. / T 13467-1992 "Fan system power balance test and calculation methods" This standard replaces GB , and GB/T 13467-1992 phase Ratio, in addition to editorial changes outside the main technical changes are as follows:

- Modify the scope of the standard;
- Remove the normative references GB 1236, GB 2624, GB 8916, JB2977, new normative references GB/T 15913, GB/T 1032, GB/T 12497;
- Delete "effective takeover point", "normal system operating conditions," "common operating conditions", "efficient fan zone" terms, an increase of "Ventilation system operating efficiency" term;
- Original Chapter 4, "test site conditions and requirements," Chapter 5, "Measurement items and content" to Chapter 4, "System Boundary indeed Fixed "and Chapter 5," Testing Requirements ";
- Original Chapter 6, "Test Method", Chapter 7, "the calculation of energy balance" to Chapter 6, "Calculation of Energy utilization",

7 Chapter "to determine the operating efficiency" and Chapter 8, "ventilation system input power and power is determined." This standard by the National Standardization Technical Committee for Energy and Management (SAC/TC20) and focal points. This standard drafting units. China National Institute of Standardization, Shanghai Energy Efficiency Center, Shanghai University of Technology, Guangzhou Zhiguang energy Ltd., Zhejiang Jiang Elite Fan Co., Ltd., Nantong City Product Quality Supervision, Inspection. The main drafters of this standard. Xiayu Juan, Li Pengcheng Chen Haihong, Lin Ling, Zhao Yuejin, Pan Chong Chao, Qin Hongbo, Zhao, Tian Jianwei, Zhang Qi-zhong, Liu Meng Peng Yanyan, Wang Weihong, Qiang to the sword, Bowie, Chen Jianhua. Fan system power balance test and calculation methods

1 Scope

GB/T 13467-2013 is the Chinese national standard on measurement and calculation methods of electric energy balance for fan system, in the field of energy and heat transfer engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 18 December 2013 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 July 2014. Classification: ICS 27.010, CCS F01. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the ventilation system to determine the power balance test and calculation related terms, definitions and symbols, the system boundary, to test Requirements, calculate the energy utilization, operating efficiency is determined, as well as to determine the input power and power and so on. This standard applies to AC electrical drag centrifugal, mixed flow and axial fan system. This standard does not apply to transportation of materials ventilator system.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 1032 Test Methods for Three-phase asynchronous motor

GB/T 8222 General electrical equipment, energy balance

GB/T 10178-2006 Industrial fans field performance test

GB/T 12497 three-phase asynchronous motor economy

GB/T 13466 AC electric drive fans (pumps, compressors) system principles of economical operation

GB/T 15913-2009 fan unit and distribution tube system energy monitoring

3.1 Terms and Definitions GB/T 13466 and

GB/T 10178-2006 define the following terms and definitions apply to this document.

3.1.1 Effective ventilation pressure effectiveventilationpressure Energy output full ventilation

system pressure boundary.

3.1.2 Fan system efficiency efficiency of fan system Output power and input power ratio
ventilation system is running.

3.2 Symbol The following symbols apply to this document. HJ fan unit power utilization Kp
fan outlet side of the gas compressibility correction factor KpY ventilation system outlet side
of the gas compressibility correction factor HY Fan system power utilization PSCK output
frequency control device power kW PSR fan system input power kW PSRj j-station unit fan
input power kW