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

GB/T 18892-2024

Replacing GB/T 18892-2002

**Environmental protection requirements for copying machinery -
Energy saving requirements for copiers and multi-function
devices**

复印机械环境保护要求 复印机及多功能一体机节能要求

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. This document replaces GB/T 18892-2002 "Environmental protection requirements for copying machinery - Energy saving requirements for electrostatic copying machines" and is compatible with GB/T 18892- Compared with.2002, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

- a) The relevant contents in "Scope" have been changed (see Chapter 1, Chapter 1 of the.2002 edition);
- b) Deleted the relevant content of "Technical Requirements" (see Chapter 2 of the.2002 edition);
- c) Added relevant content of "Typical Energy Consumption Technical Requirements" (see Chapter 4);
- d) Added relevant content of "Test Method" (see Chapter 5);

e) Added the contents of Appendix A and Appendix B (see Appendix A and Appendix B). Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document was proposed by the China Machinery Industry Federation. This document is under the jurisdiction of the National Technical Committee for Standardization of Copying Machinery (SAC/TC147). This document was drafted by: Xiamen Zhicheng Blue Ocean Technology Co., Ltd., Anxin Testing and Certification (Xiong'an) Co., Ltd., Xi'an Electronic Technology University, Beijing Chenguang Rongxin Technology Co., Ltd., China Quality Certification Center Co., Ltd., Sharp Office Equipment (Changshu) Co., Ltd., Shenzhen Ward R&D Management Consulting Co., Ltd., Tianjin Tianfu Testing Technology Co., Ltd., and Tianjin Copying Technology Research Institute Co., Ltd. The main drafters of this document are. Zheng Cheng, Su Yuanman, Fang Yong, Liu Jinhui, Yan Zhixin, Han Baoyuan, Wang Zhengliang, Liu Shengying, Wang Zhimin, Zhang Yu. The previous versions of this document and the documents it replaces are as follows:

---First published in.2002 as GB/T 18892-2002;

---This is the first revision. Environmental protection requirements for copying machinery Energy-saving requirements for copiers and multifunction printers

1 Scope

China's national energy requirements for copiers and multi-function devices, expressed as typical electricity consumption rather than as rated power. It specifies the typical energy consumption technical requirements and the test methods, with normative annexes giving the calculation of the sum of operating mode power and additional function power and the calculation of typical energy consumption. The measure is what makes this document work. An office imaging device spends almost all its life not copying: it is asleep, or in a low-power state, or waiting in ready mode. Rating it by the power it draws while a page is running through describes a condition that occupies a small part of a day and tells a purchaser nothing about the electricity bill. Typical energy consumption instead constructs a representative week - a defined number of jobs of defined size on defined days, with the intervening idle and sleep periods - and integrates the energy over it. That single figure is comparable across products and reflects the design decisions that actually matter: how fast the device enters sleep, how much it draws while asleep, and how much energy the fuser consumes coming back up. The standard therefore fixes the delay before sleep as a requirement in its own right, and it limits the standby power and the operating mode power, with additional function power factors covering the network interfaces, finishers and other options that would otherwise be excluded from the measurement. The test chapter is correspondingly detailed on the conditions that would distort the result: the environment, the supply voltage and its tolerance, the measuring instrument resolution, the timing, the test paper, the product settings as delivered, and which interface is selected when several

are present. Issued on 31 December 2024 and in force since 1 July 2025, it replaces GB/T 18892-2002.

This document specifies the typical energy consumption technical requirements for copiers and multifunction devices and describes the corresponding test methods. This document is applicable to the design and manufacture of copiers and multifunction printers with a copy format of A3 and below.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 16685-2008 Information technology office equipment - Methods of measurement of throughput of printing equipment - Class 1 and Class 2 printers

GB/T 22372 Monochrome laser printer test version

JB/T 6872 Consumption of developer (toner) for electrostatic copiers A4 ISO /

IEC 28360-1.2021 Information technology electronic equipment - Determination of chemical emission rates - Part

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Multi-function device; MFD A device with copying function and one or more functions of printing, faxing and scanning.

3.2 The weekly energy consumption of the product calculated using the corresponding test method. [Source: GB 21521-2014, 3.9, modified]

3.3 Output speed outputspeed The number of A4-size pages copied or printed per minute (in single-sided black-and-white mode). Note

1.For multifunction machines with printing function, the printing speed is taken as the output speed. Note

2.For continuous paper feed products, the output speed is rounded to [16 x maximum media width (unit.

m) x maximum copy speed (unit. m/min)], the unit is page per minute (page/min). Note

3.For products with only color printing, copying or faxing functions, the output speed is the

speed in color single-sided mode. [Source: GB 21521-2014, 3.12, modified]

4 Typical energy consumption technical requirements

4.1 The typical energy consumption of copiers and multifunction devices (hereinafter collectively referred to as "products") shall meet the requirements of Table 1, and the maximum output paper path width shall be greater than or equal to