

ICS 23.120



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

GB/T 4706.27-2024

**Safety of household and similar electrical appliances - Part 27:
Particular requirements for fans**

家用和类似用途电器的安全 第27部分：风扇的特殊要求
(English Translation)

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Foreword

This document was drafted in accordance with the rules provided in GB/T 1.1-2020 Directives

for Standardization - Part 1.Rules for the Structure and Drafting of Standardizing Documents.

This document is Part 27 of GB/T 4706 Safety of Household and Similar Electrical Appliances.

GB/T 4706 has issued the following parts.

---Part 1.General Requirements;

---Part 2.Particular Requirements for Electric Irons;

...

---Part 121.Particular Requirements for Professional Ice-cream Makers.

This document serves as a replacement for GB 4706.27-2008 Household and Similar Electrical

Appliances - Safety - Part 2.Particular Requirements for Fans. In comparison with GB 4706.27-2008, apart from structural adjustments and editorial modifications, the main technical

changes are as follows.

- a) The definition of ceiling fan suspension system is added (see 3.102);
- b) The maintenance instructions for ceiling fans are added (see 7.12);
- c) The installation instructions for ceiling fans are added (see 7.12.1);
- d) For table fans and floor fans with oscillating structures, the assessment criteria for finger pinching are added (see 20.102);
- e) The insulation requirements for pre-installed internal wiring used to power lamps are added (see 22.101);

f) The failure protection requirements for the ceiling fan suspension system are added (see 22.102);

g) The requirements for motor brush wear are added (see 27.3).

This document modifies and adopts IEC 60335-2-80:2015 Household and Similar Electrical Appliances - Safety - Part 2-80:Particular Requirements for Fans.

The technical differences between this document and IEC 60335-2-80:2015 and the causes for

the differences are as follows.

---The relevant content about the power-off device before the failure of the ceiling fan suspension device in "Structure" is deleted (see 22.102.1, Figure 101 and Figure 102).

Since the device involves foreign patent technology, combined with the actual application of Chinese fan products, this content is deleted.

Safety of Household and Similar Electrical Appliances - Part

1 Scope

This Chapter of GB/T 4706.1-2024 is REPLACED by the following.

This document specifies the particular requirements for the safety of electric fans for household

and similar purposes.

This document applies to electric fans for household and similar purposes, with a rated voltage

not exceeding 250 V for single-phase appliances and 480 V for other appliances.

NOTE 101: examples of fans included within the scope of this document.

---Ceiling fans;

---Duct fans;

---Partition fans;

---Floor fans;

---Table fans.

This document also applies to separate controllers provided with fans.

Appliances that are not intended for household use but may still be dangerous to the public,

for

example, those intended for use in shops, light industry and on farms, are also included within

the scope of this document.

The appliances covered by this document present ordinary hazards that are likely to be encountered by all people in the residential area and the surrounding environment of the residence. However, in general, this document does not take into account the following situations.

---People (including children) who are unable to safely use the appliance without supervision or instruction.

lambda Due to physical, sensory or mental impairment; or

lambda Due to lack of experience and knowledge.

---Children playing with the appliance.

NOTE 102: pay attention to the following situations.

Place a portable floor fan with a height of more than 1.7 m and a mass of more than 10 kg on a

horizontal surface. Apply a horizontal force of 40 N at a height of 1.5 m above the appliance in

the most unfavorable direction.

The appliance shall not tip over.

NOTE 101: appropriate means can be used to prevent the appliance from sliding.

20.101 Except those fans installed in a relatively high position, the fan blades shall be protected.

Blade edges and front ends with a radius of not less than 0.5 mm are considered smooth and do

not require protection if one of the following conditions is satisfied.

---The hardness of the blade material is less than D60 Shore;

---When the fan is operated at the rated voltage, the linear speed of the outer edge of the blade is less than 15 m/s;

---When the fan is operated at the rated voltage, the output power is less than 2 W.