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

**GB/T 19411-2024**

Replacing GB/T 19411-2003

**Dehumidifiers**

除湿机

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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 19411-2003 "Dehumidifiers". Compared with GB/T 19411-2003, except for structural adjustments and editorial changes, In addition, the main technical content changes are as follows:

- a) Added the terms and definitions of dehumidifiers and modified the terms and definitions of dehumidifier classification (see 3.1 to 3.3, 2003 edition). 3.1, 3.2,
- b) The terms and definitions related to dehumidification performance have been changed (see 3.5 of the 2003 edition);
- c) Added terms and definitions for standby mode, clean air volume and sterilization rate (see 4.1, 4.1.2 of the 2003 edition);
- d) The type classification of dehumidifiers has been changed (see 4.2, 4.1.4 of the 2003 edition);
- e) The requirements for model compilation have been changed (see 4.3, 6.2.1 of the 2003 edition);
- f) The basic parameters of the dehumidifier have been changed, including the normal working environment parameters and test operation parameters of the dehumidifier (see 5.1, 5.1.1 of the 2003 edition);
- g) The general requirements have been changed (see 5.1, 5.1.1 of the 2003 edition);

## 1 Scope

China's national product standard for dehumidifiers. It specifies the types and basic parameters, the technical requirements, the test methods, the inspection rules, and the marking, packaging, transport and storage, and it applies to dehumidifiers that remove moisture using a vapour compression refrigeration cycle driven by an electric motor. It does not apply to fresh air dehumidifiers. A dehumidifier is a refrigeration machine whose useful output is water rather than cold: the air is drawn over an evaporator cold enough to condense the moisture out of it, then over the condenser, so it leaves warmer and drier than it arrived. Because both heat exchangers are in the same air stream, the machine is a net heater of the room, which is the fact that separates a dehumidifier from an air conditioner and shapes the standard around it. Rating a dehumidifier is harder than rating most appliances because the output depends almost entirely on the inlet condition. Moisture removal rises steeply with both temperature and humidity - a machine that removes ten litres a day at 30 degrees Celsius and 80 per cent relative humidity may remove a third of that in a cool damp basement, which is where it is most likely to be used. So the standard fixes the rating conditions and requires performance at more than one point, and it defines the energy efficiency as removal per unit of electricity at those

conditions. It also covers the behaviour that decides whether the machine is usable at all: defrosting, since below about 15 degrees Celsius the evaporator ices up and a machine without an effective defrost cycle stops removing water; the condensate handling and the full-tank cut-out; the noise; and the safety and electrical requirements. Issued on 26 October 2024 and in force since 1 May 2025, it replaces GB/T 19411-2003.

This document specifies the types and basic parameters, technical requirements, test methods, inspection rules, as well as marking, packaging, transportation and Storage. This document applies to dehumidifiers that use a vapor compression refrigeration cycle driven by an electric motor to remove moisture. This document does not apply to fresh air dehumidifiers.

## 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 191 Pictorial markings for packaging, storage and transportation

GB/T 2423.17 Environmental testing for electric and electronic products Part