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

GB/T 46281.3-2025

**Household and similar refrigerating appliances -
Characteristics and test methods - Part 3: Energy consumption
and volume IEC 62552-3:2020**

家用和类似用途制冷器具 特性和测试方法 第3部分：耗电量和容积
(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is Part 3 of GB/T 46281 "Characteristics and Test Methods of Refrigeration Appliances for Household and Similar Purposes".

The following sections have been released.

---Part 1: General Requirements;

---Part 2: Performance Requirements;

---Part 3: Power Consumption and Capacity.

This document is equivalent to IEC 62552-3:2020 "Domestic refrigeration appliances - characteristics and test methods - Part 3.power consumption and volume".

The following minimal editorial changes have been made to this document.

---To harmonize with existing standards, the standard name has been changed to "Characteristics and Test Methods for Household and Similar Refrigeration Appliances Part 3" Divided into. power consumption and volume.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China National Light Industry Council.

This document is under the jurisdiction of the National Technical Committee on Standardization of Household Appliances (SAC/TC46).

Introduction

GB/T 46281, "Characteristics and Test Methods for Refrigeration Appliances for Household and Similar Purposes," aims to specify the characteristics and test methods for refrigeration appliances for household and similar purposes.

The sex and testing methods are proposed to consist of three parts.

---Part 1: General Requirements. The purpose is to define the scope, terminology and definitions, instruments, laboratories, and setup for refrigeration products.

---Part 2: Performance Requirements. This section aims to specify the general performance requirements and test methods for refrigeration appliances.

---Part 3: Energy Consumption and Volume. The purpose is to specify the measurement of energy consumption and volume.

Characteristics of household and similar refrigeration appliances and Test Methodology
Part 3: Power Consumption and Volume

1 Scope

This document specifies the basic requirements for household and similar refrigeration appliances that use natural or forced air convection for internal cooling.

The characteristics are described, along with the testing methods for checking these characteristics.

This document specifies methods for determining power consumption characteristics and describes how to combine these methods to evaluate different usage and climatic conditions.

The document also describes the power consumption. The determination of the volume is also described.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 46281.1-2025 Characteristics and Test Methods for Refrigeration Appliances for Household and Similar Purposes - Part 1: General Requirements (IEC 62552-1:2020, IDT)

GB/T 46281.2-2025 Characteristics and test methods for household and similar refrigeration appliances - Part 2: Performance requirements (IEC 62552-2:2020, IDT)

3.1 Terms and Definitions

The terms and definitions defined in GB/T 46281.1-2025 and the following terms and definitions apply to this document.

3.1.1

Specified auxiliary devices their functions or characteristics affect the power consumption of refrigeration appliances, and their actual power consumption depends on the usage or operating conditions.

Note 1: This document provides optional provisions for determining the impact of these functions and features on power consumption, as required by the region.

Note 2: If applicable, the testing requirements for the specified auxiliary devices are given in Appendix F, and their application is specified in 6.8.4. The auxiliary devices specified in this document are only for environmental control.

Prefabricated anti-condensation heaters and water tank type automatic ice makers.

3.1.2

defrost interval

Measure or evaluate the length of a defrost control cycle, from the start of one defrost control cycle to the immediately following defrost control cycle.

The time taken, expressed in hours (h), is the start and end time of the control cycle.

symbols

The following symbols apply to this document.

E --- Electricity consumption within a specified time period (day, year, etc.), expressed in watt-hours (W·h) or kilowatt-hours (kW·h);

P --- Average steady-state power consumption over a specified time period, in watts (W);