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

GB/T 4706.90-2024

Replacing GB 4706.90-2014

**Safety of household and similar electrical appliances - Part 90:
Particular requirements for commercial electric microwave
ovens**

家用和类似用途电器的安全 第90部分：商用微波炉的特殊要求

(English Translation)

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Table of Contents

Preface	
Introduction	
1 Scope	
2 Normative references	
3 Terms and Definitions	
4 General requirements	
5 General conditions for testing	
6 Categories	
7 Markings and instructions	
8 Protection against contact with live parts	
9 Starting of electrical appliances	
10 Input power and current	
11 Fever	
12 Empty Chapter	
13 Leakage current and electrical strength at operating temperature	
14 Transient overvoltage	
15 Moisture resistance	
16 Leakage current and electrical strength	
17 Overload protection of transformers and related circuits	
18 Durability	
19 Abnormal work	
20 Stability and mechanical hazards	
21 Mechanical strength	
22 Structure	
23 Internal wiring	
24 Element	
25 Power connection and external cord	
26 Terminal block for external wires	
27 Grounding measures	
28 Screws and connections	
29 Electrical clearances, creepage distances and solid insulation	
30 Heat and flame retardant	

31 Rust prevention 17

32 Radiation, toxicity and similar hazards

Appendix

Appendix A (Informative) Routine Test

Appendix AA (Normative) Combination microwave ovens

Appendix BB (Normative) Requirements for commercial microwave ovens with transport devices and without doors

Appendix CC (informative) Overview of requirements for covers, access devices and similar parts

Appendix DD (informative) Basic principles of microwave barrier and related leakage tests

Appendix EE (Normative) Microwave ovens for use on ships

References

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 is Part 90 of GB/T 4706 "Safety of Household and Similar Electrical Appliances". GB/T 4706 has been published as follows part.

--- Part 1: General requirements;

--- Part 2: Particular requirements for electric irons;

--- Part 121: Particular requirements for professional ice cream machines.

This document replaces GB 4706.90-2014 "Particular requirements for safety of commercial microwave ovens for household and similar electrical appliances" and Compared with GB 4706.90-2014, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

--- Changed the term "clearance area" to "unloading area" (see 3.119, 3.119 of the 2014 edition);

--- Added the term and definition of "thermal functional surface" (see 3.128);

--- Changed the instructions for use of commercial road vehicles and the appliance cannot be cleaned with a steam cleaner (see 7.12, 2014 Version 7.12);

--- Added the marking requirements for hot surfaces specified in 7.15 (see 7.15);

--- Changed the following information. When the temperature rise of the enclosure of the

electric appliance does not meet the requirements, the maximum temperature rise shall not exceed twice the temperature rise shown (see 11.8, 2014 version 11.8);

--- Added alternative measurement methods when microwave leakage exceeds 100W/m² (see Chapter 13, Chapter 13 of the 2014 edition);

--- Added requirements for door interlocking (see 22.103.1 and 22.103.2);

--- Added that appliances installed on commercial road vehicles, coaches, food stalls and similar vehicles should be able to withstand the vibration (see 22.120);

--- Added the following provisions for appliances controlled by programmable electronic circuits that limit the number of heating elements and motors that are energized at the same time.

Any combination of activation of the heating element and the motor shall not result in an unsafe content of the appliance (see 22.121);

--- Added that for class I appliances, one pole of the power output of the microwave generator (if any) is functionally grounded (see 27.1

Note 101);

--- Added instructions for applicable standards for different combination microwave ovens (see Appendix AA);

--- Changed the requirement for installing barrier devices in the loading and unloading areas where ordinary people pick up and place microwave loads for transmission type appliances.

See (see BB.22.119.4, 2014 edition of BB.22.119.4);

--- Changed some contents of Appendix EE (see EE.7.1, EE.7.12 and EE.11, 2014 edition of EE.7.1, EE.7.12 and EE.11);

--- Added that the shelf should have a non-removable non-slip top surface and gave test requirements (see EE.22.103).

This document is equivalent to IEC 60335-2-90:2019 "Safety of Household and Similar Electrical Appliances Part 2-90.Commercial Microwave Ovens" Special Requirements.

The following minimal editorial changes were made to this document.

--- The name of the standard was changed to "Safety of Household and Similar Electrical Appliances Part 90: Particular Requirements for Commercial Microwave Ovens", and the standard was enhanced the coordination of the system.

Introduction

GB/T 4706 "Safety of Household and Similar Electrical Appliances" adopts IEC 60335 for the most part.

The structure of IEC 60335 is divided into several parts, consisting of general requirements and special requirements. Part 1 is general requirements, and the other parts are for products covered by special requirements, their safety requirements are general requirements used in combination with the special requirements.

The requirements include supplements and modifications to the corresponding clauses in the general requirements to provide complete requirements for each product.

This document is the protection requirements for electrical, mechanical, thermal, fire and radiation risks when the appliance is used normally in accordance with the instructions.

This document also covers abnormal conditions that may occur during use and considers how electromagnetic interference may affect the safe operation of the equipment.

This document has taken into account the requirements specified in GB/T 16895 "Low Voltage Electrical Installations". The appliance is connected to the power supply in accordance with the electrical wiring rules.

requirements are coordinated.

If multiple functions of an appliance involve other parts of GB/T 4706, the other parts shall apply to the appliance separately as long as it is reasonable.

Each function. If applicable, consider the impact of one function on other functions.

When no additional requirements are given in other parts for hazards already included in this document, GB/T 4706.1 applies.

GB/T 4706 is a standard covering appliance safety and takes precedence over general standards/horizontal standards covering the same subject.

This document is used in conjunction with GB/T 4706.1-2024 "Safety of Household and Similar Electrical Appliances Part 1: General Requirements".

The part marked "applicable" in the document indicates that GB/T 4706.1-2024 "Safety of Household and Similar Electrical Appliances - Part 1: General Requirements" the corresponding clauses in the "Requirements" shall apply to this document; for the parts marked "replace" in this document, the clauses in this document shall prevail;

The "Add" part indicates that in addition to complying with the corresponding clauses in GB/T 4706.1-2024, the additional clauses in this document must also be complied with.

Clause; The part marked "modified" in this document indicates that the corresponding clauses of GB/T 4706.1-2024 are modified.