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

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**Electric dishwashers for household use - Methods for
measuring the performance**

家用电动洗碗机 性能测试方法

(English Translation)

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1 Scope

This document specifies the main performance characteristics of electric dishwashers for household and similar use and describes standard methods for testing these characteristics.

This document applies to electric dishwashers for household and similar use, using hot and / or cold water.

This document does not address safety and minimum performance requirements.

2 Normative References

The contents of the following documents constitute indispensable clauses of this document through the normative references in the text. In terms of references with a specified date, only versions with a specified date are applicable to this document. In terms of references without a specified date, the latest version (including all the modifications) is applicable to this document.

GB 38383-2019 The Minimum Allowable Values of the Energy, Water Consumption and Grades for Dishwashers

ISO 607 Surface Active Agents and Detergents - Methods of Sample Division

NOTE: GB/T 6372-2006 Surface Active Agents and Detergents - Methods of Sample Division (ISO 607:1977, IDT)

ISO 80000-1:2022 Quantities and Units - Part 1: General

IEC 60704-2-3 Household and Similar Electrical Appliances - Test Code for the Determination of Airborne Acoustical Noise - Part 2-3: Particular Requirements for Dishwashers

NOTE: GB/T 4214.3-2023 Test Method for Noise of Household and Similar Electrical Appliances - Particular Requirements for Dishwashers (IEC 60704-2-3:2017, MOD)

IEC 60705 Household Microwave Ovens - Methods for Measuring Performance

NOTE: GB/T 18800-2017 Household Microwave Oven - Methods for Measuring Performance (IEC 60705:2014, IDT)

IEC 60734 Household Electrical Appliances - Performance - Water for Testing

NOTE: GB/T 23119-2017 Household and Similar Electrical Appliances - Water for Performance

Except for the built-in or integrated types (see 5.1.3), dishwashers shall be tested as the free- standing type. If it can be both free-standing and built-in / integrated, then, the test shall be carried out as free-standing.

5.1.3 Built-in and integrated dishwashers

Dishwashers that can only be installed as built-in or integrated shall be installed in a housing that complies with the requirements of Appendix N. The housing is shown in Figure N.1 and

Figure N.2.

5.2 Test Procedures and Conditioning of Test Machine

Before conducting a performance test on a new dishwasher, run the dishwasher for at least 3 cycles using a wash programme suitable for normal or heavily soiled dishes, using a standard detergent (see 5.7) and a standard rinse aid (see 5.8) to remove manufacturing residues; this process can be used with a clean load or no load.

NOTE 1: ignore any cycles or operations performed during product manufacturing.

If noise testing is required, it shall be carried out in accordance with the requirements of Chapter

9 before performance testing. Noise testing shall be completed under test conditions that satisfy the corresponding standards. Between the consecutive steps specified in the following procedures, the test machine shall not be subjected to additional cycles.

Evaluation of cleaning and / or drying performance shall be carried out using soiled load (Chapter 6). Drying and cleaning performance may be consecutively evaluated in a single test or in separate tests. Power consumption, water consumption, programme time (Chapter 8) shall be simultaneously tested with the combined cleaning and drying performance test runs (see

Chapter 6 and Chapter 7).

NOTE 2: the evaluation criteria for cleaning performance can be found in Appendix O.

The manufacturer or supplier may have information on the design and operation of the dishwasher that allows the drying performance to be determined equivalently using alternative methods, for example, using unsoiled dishes and independent testing. For the purposes of the declaration and validation of this document, the method using soiled load specified in the preceding paragraph takes precedence over any other determination. The method used shall be documented.

Between two test series, the reference machine and the test machine shall be cleaned for at least two cycles using the test procedures with a standard detergent (see 5.7). Before a new test series is started, ensure that all visible areas of the filter and the appliance, as well as any areas supplied by the manufacturer to the consumer are cleaned. When checking for residual soil inside the dishwasher, special attention shall be paid to deposits in the filter, water cup (see

I.3.5), spray arms, door gaps and rack guide rails, etc.

If the supplier mentions the settings for relevant water softener, salt shall be added and the water