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NATIONAL STANDARD OF THE
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ICS 13.100
K 09

GB 4706.24-2008

Replacing GB 4706.24-2000

**Household and Similar Electrical Appliances - Safety -
Particular Requirements for Washing Machines**

家用和类似用途电器的安全

洗衣机的特殊要求

(IEC 60335-2-7:2008 (Ed7.0), MOD)

Issued on: December 30, 2008

Implemented on: March 1, 2010

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine;**

**Standardization Administration of the People's Republic of
China.**

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Foreword

All the technical content of this Part is mandatory.

GB 4706 *Household and Similar Electrical Appliances - Safety* is composed of several parts. Part 1 is general requirements, and the other parts are special requirements.

This is Part 24 of GB 4706. This Part shall be used in conjunction with GB 4706.1-2005 *Household and Similar Electrical Appliances - Safety - Part 1: General Requirements*.

The part that states “applicable” in this Part indicates that the corresponding clauses in GB 4706.1-2005 are applicable to this Part; the part that states “replacement” or “modification” in this Part shall prevail; the part that states “addition” indicates that in addition to complying with the corresponding clauses in GB 4706.1-2005, the additional clauses in this Part shall also be abided by.

This Part modifies the adoption of IEC 60335-2-7:2008 *Household and Similar Electrical Appliances - Safety - Part 2-7: Particular Requirements for Washing Machines*.

In comparison with IEC 60335-2-7, this Part has the following main difference:

- In 3.1.9, the water temperature is modified into: $50\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ for appliances without heating elements.

This Part serves as a replacement of GB 4706.24-2000 *Safety of Household and Similar Electrical Appliances - Particular Requirements for Washing Machines*.

In comparison with GB 4706.24-2000, this Part has the following main differences:

- Chapter 2 “Normative References” is added.
- In 3.1.9, the load of cotton with dimensions $900\text{ mm} \times 900\text{ mm}$ is added.
- 5.2 is added.
- 5.3 added: the tests of 21.101 and 21.102 are performed before the tests of Chapter 18; the test of 22.104 is performed after the tests of Chapter 18.
- 6.1 is modified: the appliances shall be divided into three types: Type-I, Type-II or Type-III.
- 7.12.1 is modified: for washing machines with ventilation openings in the base, it shall be indicated in the installation instructions that the openings must not be obstructed by a carpet.
- 15.2 added: the spillage test is applicable to all washing machines.

- 18.101 and 18.102 are added.
- 19.13 added: if the appliance can still be operated, it shall comply with the relevant requirements of 20.103 ~ 20.105.
- 20.1 is modified: the appliance is emptied or filled as specified for normal operation, whichever is more unfavorable; doors and lids are closed, and any castors are turned to the most unfavorable position.
- 20.102 load unbalance test is added.
- 20.103 is modified: the door or lid shall have an interlocking device, so that the appliance can only be operated when the door or lid is closed.
- 20.104 and 20.105 are added.
- 21.101 and 21.102 are added.
- 22.101 is modified: the structure of the appliance shall enable that when the water level is above the lower edge of the door (when opening), the door shall not be opened through a simple action while the appliance is being operated.
- 22.104 and 22.105 are added.
- 24.1.4: the number of cycles of programmer operations is modified.
- 29.2 is added.
- Appendix CC and Appendix DD are added.

In this Part, Appendix AA, Appendix BB, Appendix CC and Appendix DD are normative.

This Part was proposed by China National Light Industry Council.

This Part shall be under the jurisdiction of National Technical Committee 46 on Household Appliances Condenser of Standardization Administration of China (SAC/TC 46).

The main drafting organizations of this Part: China Household Electric Appliance Research Institute; Qingdao Haier Washing Machine Co., Ltd.; BOSCH Home Appliance (Jiangsu) Co., Ltd.; Wuxi Little Swan Company Limited; Ningbo Changer Electron Co., Ltd.; Zhejiang More Electric Appliances Co., Ltd.; Ningbo Xinle Household Appliances Co., Ltd.; Ningbo Jide Electrical Appliance Co., Ltd.; Ningbo Lesli Group Co., Ltd.; Baoerma Electrical Group Co., Ltd.

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Household and Similar Electrical Appliances - Safety - Particular Requirements for Washing Machines

1 Scope

This Chapter in GB 4706.1-2005 is replaced by the following content:

This Part is applicable to the safety of household and similar electric washing machines for washing clothes and textiles. The rated voltage of single-phase appliances does not exceed 250 V; the rated voltage of other appliances does not exceed 480 V.

This Part is also applicable to the safety of household and similar electric washing machines that use electrolyte instead of detergent. The additional requirements of such appliances are shown in Appendix CC.

NOTE 101: for washing machines equipped with a power-driven wringer, it shall be ensured that their electrical protection and thermal hazards reach the requirements of an acceptable level, see Appendix DD for guidance.

In terms of appliances not intended for normal household use, as long as they may be dangerous to the public, for example, appliances used by the infirm in shops, or used in light industry and agriculture are included in the scope of this Part.

NOTE 102: for example, washing machines for public use in residential areas or laundry rooms.

This Part involves general hazards arising from appliances that all people may encounter in the home or its surrounding environment. However, this Part usually does not consider:

---these people (including children):

- Physical, sensory or mental capabilities; or
- Lack of knowledge and experience.

Prevent them from using the appliances without supervision or guidance;

---the situation of children's playing with the appliances.

NOTE 103: the following facts shall be paid attention to:

---for appliances used on vehicles, ships or aircrafts, additional requirements may be required;

---the national health care department, national labor protection department, national water supply management department and similar departments have specified additional requirements for the appliances.

NOTE 104: this Part is inapplicable to:

---washing machines specially designed for industrial purpose (ISO 10472-2);

---appliances used in special environments, for example, environments where corrosive gas or explosive gas (dust, steam or coal gas) exists.

2 Normative References

The clauses of the following document become clauses of this Part through the reference in this Part. In terms of references with a specified date, all subsequent amendments (excluding corrected content) or revisions are not applicable to this Part. However, all parties that reach an agreement in accordance with this Part are encouraged to explore the possibility of adopting the latest editions of these documents. In terms of references without a specified date, the latest edition is applicable to this Part.

This Chapter of GB 4706.1-2005 is applicable, except for the following contents.

Addition:

GB/T 1690-2006 Rubber Vulcanized or Thermoplastic - Determination of the Effect of Liquids

IEC 60456 Clothes Washing Machines for Household Use - Methods for Measuring the Performance

GB 14536.13-2008 Automatic Electrical Controls for Household and Similar Use - Particular Requirements for Electrically Operated Door Locks

3 Terms and Definitions

The following terms and definitions are applicable to this Part.

This Chapter of GB 4706.1-2005 is applicable, except for the following contents.

3.1.9 Replacement:

Normal Operation

The appliance is operated under the following conditions:

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