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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

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GB 4706.12-2006

Replacing GB 4706.12-1995

Safety of household and similar electrical appliances - Particular requirements for storage water heaters

家用和类似用途电器的安全

储水式热水器的特殊要求

(IEC 60335-2-21:1997, MOD)

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Foreword

All contents of this part of GB 4706 are mandatory.

GB 4706 "Safety of household and similar electrical appliances" is divided into the following parts:

- Part I: General requirements;
- Part II: Particular requirements.

This part is the particular requirements for storage water heaters.

This part replaces GB 4706.12-1995 "Safety of household and similar electrical appliances - Particular requirements for storage water heaters".

This part modifies and adopts IEC 60335-2-21:1997. This part shall be used in conjunction with GB 4706.1-1998.

This part is formed by adding or modifying GB 4706.1. The specific provisions in GB 4706.1 are not mentioned in this part, which means that the corresponding provisions in GB 4706.1 apply to this part. In this part, the portion indicated as "applicable" means that the corresponding provisions in GB 4706.1 are applicable to this part. In this part, the portion indicated as "replaced" means that the provisions of this part shall prevail. In this part, the portion indicated as "added" means that in addition to the corresponding provisions of GB 4706.1, it must also comply with the provisions added in this part.

The main difference between this part and IEC 60335-2-21:1997 is the addition of Appendix AA (normative).

Appendix AA to this part is a normative appendix.

This part was proposed by China Light Industry Federation.

This part shall be under the jurisdiction and interpretation of the National Household Appliance Standardization Technical Committee (SAC/TC 46).

Drafting organizations of this part: China Household Electrical Appliances Research Institute, Haier Water Heater Co., Ltd., Aio Smith (China) Water Heater Co., Ltd., Shuaikang Water Heater Co., Ltd., Kangquan Water Heater Co., Ltd., Meroni Sanitary Ware (China) Co., Ltd., Shenzhen Entry& Exit Inspection and Quarantine Bureau.

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Safety of household and similar electrical appliances -

Particular requirements for storage water heaters

1 Scope

This chapter of GB 4706.1-1998 is replaced by the following:

This part of GB 4706 relates to the safety of storage water heaters whose single-phase appliances have a rated voltage not exceeding 250 V, and other appliances whose rated voltage does not exceed 480 V for domestic and similar purposes.

Appliances that are not intended for general household use but still pose a danger to the public, such as appliances intended for use by persons without knowledge of electricity in shops, light industries, and farms are also within the scope of this part.

As a practical matter, this part deals with general hazards that arise from appliances that can be encountered by everyone in the home and surrounding environment.

This part generally does not consider the following situations:

- Appliances used by children, old, young, sick, and weak without care;
- Children playing with appliances.

Note 1: Attention is drawn to the following:

- Additional requirements may be required for appliances intended for use on plateaus;
- Additional requirements may be required for appliances intended for use on a vehicle, ship or aircraft;
- Additional requirements may be required for appliances intended for use in tropical countries;
- Additional requirements have been developed by health, labor protection, water and similar authorities in many countries;
- In many countries there are also installation regulations for appliances connected to water.

Note 2: This part does not apply to:

- Appliances for boiling water (IEC 60335-2-15);
- Fast-heating water heater (IEC 60335-2-35);
- Commercial electric hot water boilers and liquid heaters (IEC 60335-2-63);
- Commercial vending machines (IEC 60335-2-75);
- Appliances intended for industrial use;
- Equipment intended for use in special places, such as places with corrosive and explosive gases (dust, steam or gas).

Note 3: Category I water heaters that provide emergency protection when the grounding system is abnormal shall meet the requirements of Appendix AA.

2 Definitions

This chapter of GB 4706.1-1998 applies except for the following:

2.2.9 Replacement:

Normal operation

The work of appliance after installation and filling with cold water according to the instructions.

2.101

Storage water heater

A fixed appliance that heats and stores water in a container and is equipped with a water temperature control device.

Note: The container can be insulated or uninsulated.

2.102

Closed water heater

The water storage heater that does not communicate with the atmosphere and is designed to work under the pressure of the water supply system, whose water flow is controlled by one or more valves in the water outlet system.

Note 1: A simplified diagram of a closed water heater is as shown in Figure 101a).

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