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

GB/T 4706.18-2024

Replacing GB 4706.18-2014

**Safety of household and similar electrical appliances - Part 18:
Particular requirements for battery chargers
(English Translation)**

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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 18 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 4706.18-2014 "Particular requirements for safety battery chargers for household and similar electrical appliances" and Compared with GB 4706.18-2014, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) Changed the scope of application. from "output is safety extra-low voltage" to "output voltage does not exceed ripple-free DC 250V" (see Chapter 1, Chapter 1 of the 2014 edition);
- b) Added the terms and definitions of "Type 1 battery charger" and "Type 2 battery charger" (see Chapter 3);
- c) Added the requirement that "battery chargers for outdoor use should be at least IPX4" (see 6.2);
- d) Two symbols are added (see 7.6).
- e) Added the instructions for use of type 1 battery charger and type 2 battery charger (see 7.12);
- f) Added test for Type 2 battery charger (see 8.1.4);

- g) Changed the output voltage requirements for Type 1 and Type 2 battery chargers (see 10.101, 2014 edition) 10.101);
- h) Changed the provisions for output current measurement values for Type 1 battery charger and Type 2 battery charger (see 10.102, 2014 edition) 10.102);
- i) Added "The relevant standard for isolation transformers is GB/T 19212.5-2011" (see 24.1.4);
- j) Added "This requirement also applies to the output cord of battery chargers with a rated output voltage exceeding 42.4 V" (see 25.5, 25.7, 25.8 and 25.15);
- k) A normative Appendix BB Isolation transformer is added (see Appendix BB).

This document is equivalent to IEC 60335-2-29:2019 "Safety of Household and Similar Electrical Appliances Part 2-29.Battery Chargers 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 18: Particular Requirements for Battery Chargers", and the standard was enhanced the coordination of the system.

Introduction

GB/T 4706 "Safety of Household and Similar Electrical Appliances" adopts most of IEC 60335. On this basis, GB/T 4706 refers to the structure of IEC 60335 is divided into several parts, consisting of general requirements and special requirements. GB/T 4706 consists of several parts.

The first part is general requirements, and the other parts are special requirements. For products covered by special requirements, their safety requirements are the same as general requirements.

The special requirements are used in conjunction with the general requirements, which include supplements and modifications to the corresponding clauses in the general requirements to provide Complete product requirements.

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

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 respective functions as long as it is reasonable.

For each function of the appliance, if applicable, the effect of one function on other functions shall be considered.

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 the corresponding clauses in GB/T 4706.1-2024 are applicable to this document; the part marked "replaces" in this document indicates that the corresponding clauses in GB/T 4706.1-2024 are applicable to this document.

For the parts marked as "added" in this document, in addition to complying with GB/T 4706.1-2024, the provisions in this document shall prevail.

In addition to the corresponding clauses, the clauses added in the clauses of this document must also be complied with; the part of this document marked "modified" means that in GB/T 4706.1-the relevant provisions of 2024 will be modified.

Safety of household and similar electrical appliances Part 18: Particular requirements for battery chargers

1 Scope

This chapter of GB/T 4706.1-2024 is replaced by the following content.

This document specifies the safety requirements for battery chargers for household and similar use.

This document applies to household and Similar purpose battery charger.

Battery chargers intended to charge batteries in appliances used at home but not within the scope of the GB/T 4706 series of standardization documents device, also applies to this document.

The requirements for battery chargers used by children aged not less than 8 years without supervision are given in Annex AA.

Battery chargers not intended for general household use but which may nevertheless