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

GB/T 23307-2023

Replacing GB/T 23307-2009

Floor socket-outlets for household and similar purposes

家用和类似用途地面插座

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Foreword

This document complies with the provisions of GB/T 1:1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents" Drafting: This document replaces GB/T 23307-2009 "Household and similar ground sockets": Compared with GB/T 23307-2009, except for the structure In addition to adjustments and editorial changes, the main technical changes are as follows:

---The definition of ground socket has been changed (see 3:1,:2009 version of 3:1), and the schematic diagram of ground socket has been added (see Figure 1);

---Changed the definition of function modules (see 3:2,:2009 version of 3:2);

---Added the definition of self-locking mechanism for pop-up ground sockets (see 3:3);

---Deleted the definitions of module fixed ground sockets and module movable ground sockets (see 3:3 and 3:4 of the:2009 edition);

---Deleted the definitions of embedded ground sockets and overhead ground sockets (see 3:5 and 3:6 of the:2009 edition);

---Deleted the definitions of pop-up ground sockets, rotating ground sockets, and clamshell ground sockets (see 3:7, 3:8,:2009 version) 3:9);

---Deleted the definitions of detachable ground sockets and non-detachable ground sockets (see 3:10 and 3:11 of the:2009 edition);

---Deleted the classification of whether the cover is detachable (see 7:4 of the:2009 edition);

---Added main technical parameters (see 4:2);

--- Added classification and classification based on whether the product has protection against harmful water intrusion when in use and with the lid closed: Classification of safety protection devices or equipment with or without current (voltage) (see 4:1:7, 4:1:8);

---Added documents that sockets, installation boxes and enclosures, protectors, TV modules, telephone modules, and USB power supplies should comply with (see 5:1:2);

---Added grounding requirements and inspection methods for ground socket covers (see 5:2:3, 6:3:1);

--- Added requirements and inspection methods for protective devices or equipment reset buttons (see 5:2:4, 6:3:1);

1 Scope

China's national standard for floor socket-outlets for household and similar use. It specifies the classification, the requirements, the test methods, the inspection rules and the marking of socket-outlets installed in the floor. A socket in the floor is an ordinary socket in an extraordinary position, and every additional requirement follows from where it is. It is walked on, so the lid and the housing carry a mechanical load and the assembly must not deform enough to break the electrical clearances; it is walked on repeatedly, so the hinge and the closure are tested over a large number of cycles. It is where liquid ends up: a spilt drink, a mopped floor, a leak - and the socket sits in a recess in which water collects rather than draining away, which is why the ingress protection requirement is central here and marginal in a wall socket. It is a trip hazard and an obstruction, so the height above the finished floor and the profile of the lid are specified. It is installed in a floor void or a screed, so the box, the depth, the cable entry and the way the assembly is fixed and levelled during construction are part of the standard rather than the installer's problem. And it is often fitted with a plug left permanently in place with the lid closed on the cable, so the cable exit and the strain relief have to work with the lid shut. The electrical requirements are those of any socket-outlet - contacts, temperature rise, dielectric strength, breaking capacity, protection against electric shock - applied under those conditions. Issued on 28 December 2023 and in force since 1 July 2024, it replaces GB/T 23307-2009.

This document stipulates the classification, main technical parameters, technical requirements, inspection rules, marking, packaging and transportation of household and similar ground sockets: Transmission and storage, describes test methods for floor socket-outlets for household and similar purposes: This document applies to ground sockets for household and similar purposes used indoors (hereinafter referred to as ground sockets): This document does not apply to floor sockets used in industrial locations:

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document

through normative references in the text: Among them, the dated quotations For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document:

GB/T 1002 Types, basic parameters and dimensions of single-phase plugs and sockets for household and similar purposes

GB/T 1003 Types, basic parameters and dimensions of three-phase plugs and sockets for household and similar purposes

GB/T 1768 Determination of abrasion resistance of paints and varnishes - Rotating rubber grinding wheel method

GB/T 2099:1-2021 Plugs and sockets for household and similar purposes Part 1: General requirements GB/T 2423:

17 Environmental testing of electrical and electronic products Part 2: Test methods Test Ka: Salt spray

GB/T 4208 Shell protection level (IP code)

GB 4943:1-2022 Audio, video, information technology and communication technology equipment Part 1: Safety requirements

GB/T 6461 Rating of specimens and specimens after corrosion testing of metal and other inorganic coatings on metal substrates GB/T 9254:

1 Electromagnetic compatibility of information technology equipment, multimedia equipment and receivers Part 1: Emission requirements GB/T 11318:

1 Equipment and components for cable distribution systems for television and sound signals Part 1: General specifications GB/T 11318:

12 Cable distribution system equipment and components for television and sound signals - Part 12: General specifications for system outputs

GB/T 13384 General technical conditions for mechanical and electrical product packaging GB/T 14536:

3 Terms and definitions

The terms and definitions defined in GB/T 2099:1-2021, GB/T 17466:23 and the following apply to this document: