

ICS 29.120.30

CCS K 30



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

GB 1002-2024

Replacing GB/T 1002-2021

**Single Phase Plugs and Socket-outlets for Household and
Similar Purposes - Types, Basic Parameters and Dimensions**

家用和类似用途单相插头插座 型式、基本参数和尺寸

Issued on: July 24, 2024

Implemented on: August 1, 2025

Issued by: State Administration for Market Regulation;

Standardization Administration of the People's Republic of China.

Table of Contents

Foreword	3
1 Scope	5
2 Normative References.....	5
3 Terms and Definitions	6
4 Technical Requirements	6
5 Test Methods	10
6 Implementation of Standard	12
Bibliography	30

Foreword

This document was drafted in accordance with the rules provided in GB/T 1.1-2020 *Directives for Standardization - Part 1: Rules for the Structure and Drafting of Standardizing Documents*.

This document serves as a replacement of GB/T 1002-2021 *Single Phase Plugs and Socket-outlets for Household and Similar Purposes - Types, Basic Parameters and Dimensions*. In comparison with GB/T 1002-2021, apart from structural adjustments and editorial modifications, the main technical changes are as follows:

- The scope of application of this Standard is modified (see Chapter 1; Chapter 1 of Version 2021);
- The definition of direct plug-in equipment is added (see 3.1);
- The content of socket jack arrangement and combination (see 4.1.3) and an example of the schematic diagram (see Figure 7) are added;
- The content of the position of the plug bush and the plug pin of two-pole grounded socket-outlets is added (see 4.1.4);
- It is added that the single pin of a plug shall not undergo axial rotation that changes the type and position (see 4.1.5);
- The requirements for the inner frame of the fixed pin of non-rewireable plug are added (see 4.1.6);
- The requirements for the convex part of the plug mating surface and the measurement requirements for the length of the plug pin are added (see 4.2.1);
- The requirements for the insulating sheath of the plug pin are modified (see 4.2.2; 4.2.2 of Version 2021);
- The content of single-phase two-pole ungrounded plug is modified (see 4.2.3; 4.2.3 of Version 2021);
- The content of the plug for direct plug-in equipment is added (see 4.3);
- The requirements for the distance between the live plug bush of the socket-outlet and the mating surface are modified (see 4.4.1; 4.3.1 of Version 2021);
- The minimum distance between the live plug bush and the mating surface in Figure 6 is added (see Table 1);
- The depth of the plug pin that can be inserted into corresponding cavity of the socket jack is added (see 4.4.3);

- The pin length measurement method for plugs of the direct plug-in equipment is added (see 5.1);
- The pin bending test method is added (see 5.3);
- The roller drop test method is added (see 5.5);
- The implementation of the Standard in Chapter 6 is added (see Chapter 6);
- The thickness t and tolerance of the plug pin (see Figure 1 and Figure 3; Figure 1 and Figure 3 of Version 2021), as well as the dimensions and tolerances of the corresponding measuring gauge are modified (see Figure 12, Figure 13, Figure 23 and Figure 24; Figure 13, Figure 14, Figure 15 and Figure 16 of Version 2021);
- An example of the shape of the pin end is added (see Figure 1 and Figure 3);
- The type, dimensions, measuring gauge and corresponding technical content of 32 A plugs and socket-outlets are added (see Figure 5, Figure 6, Figure 14, Figure 18, Figure 21 and Figure 25);
- The dimensions of the measuring gauge are modified (see Figure 16, Figure 17, Figure 19, Figure 20 and Figure 22; Figure 8, Figure 9, Figure 10, Figure 11 and Figure 12 of Version 2021).

Please be noted that certain content of this document may involve patents. The institution issuing this document does not undertake the responsibility of identifying these patents.

This document was proposed by and shall be under the jurisdiction of Ministry of Industry and Information Technology of the People's Republic of China.

The issuing of the previous versions:

- Firstly issued in 1967 as GB 1002-1967, firstly revised in 1980, secondly revised in 1996, thirdly revised in 2008 and fourthly revised in 2021;
- This is the fifth revision. It is revised into a mandatory national standard.

Single Phase Plugs and Socket-outlets for Household and Similar Purposes - Types, Basic Parameters and Dimensions

1 Scope

This document specifies the types, basic parameters and dimensions of single-phase plugs and socket-outlets for household and similar purposes, and describes the corresponding test methods.

This document is applicable to single phase plugs and socket-outlets for household and similar purposes, with an AC frequency of 50 Hz, a rated voltage of 250 V and a rated current not exceeding 32 A.

NOTE: examples of products, to which, the types and dimensions of this document are applicable include:

- socket-outlets used in household scenarios;
- plugs provided with electrical equipment;
- plugs of direct plug-in equipment;
- fixed integrated AC-powered socket-outlets with a rated voltage of 220 V and for conductive charging of electric vehicles;
- charging socket-outlets in centralized charging facilities for electric bicycles and electric motorcycles.

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/T 1184-1996 Geometrical Tolerancing - Geometrical Tolerance for Features without Individual Tolerance Indications

GB/T 2099.1-2021 Plugs and Socket-outlets for Household and Similar Purposes - Part 1: General Requirements

GB/T 2099.3 Plugs and Socket-outlets for Household and Similar Purposes - Part 2-5: Particular Requirements for Adaptors