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

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Plugs, socket-outlets and couplers with arcuate contacts

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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 of Standardization Documents"

Drafting.

This document uses the redrafting method to modify and adopt IEC 62986.2017 "Plugs, Sockets and Couplers with Curved Contacts".

The technical differences between this document and IEC 62986.2017 and the reasons are as follows.

---Regarding normative reference documents, this document has made adjustments with technical differences to adapt to my country's technical conditions and adjustments.

The situation is collectively reflected in Chapter 2 "Normative Reference Documents", and the specific adjustments are as follows.

- * Replace IEC 60228.2004 with GB/T 3956 which is equivalent to adopting international standards;
- * Replace IEC 60529 with GB/T 4208, which is equivalent to adopting international standards;
- * Replace IEC 60245-4 with GB/T 5013.4 which is equivalent to adopting international standards;
- * Replace IEC 60227 (all parts) with GB/T 5023 (all parts) equivalent to adopting international standards;
- * Replace IEC 60417 with GB/T 5465.1-2009, which is modified to adopt international standards;
- * Replace ISO 1456 with GB/T 9797 which is equivalent to adopting international

standards;

* Replace ISO 2081 with GB/T 9799 which is equivalent to adopting international standards;

* Replace IEC 60309-1:1999 with GB/T 11918.1-2014 which is modified to adopt international standards;

* Replace ISO 2093 with GB/T 12599 modified to adopt international standards;

* Replace IEC 60269-1 with GB/T 13539.1 which is equivalent to adopting international standards;

* Replace IEC 60269-2 with GB/T 13539.2 which is equivalent to adopting international standards;

* Added GB/T 5169.11;

--- In 7.6, "gasoline" is changed to "95% n-hexane" (see 7.6).

---According to my country's power supply voltage frequency, a test voltage frequency of 50Hz has been added to 18.5 (see 18.5).

---According to the actual situation of cables in our country, 53 types of cables corresponding to 30A in Table 10 have been deleted (see Table 10).

---According to the relevant provisions of GB/T 1.1, in Chapter 1 "Scope", "This document specifies plugs and sockets with curved contacts"

And the technical requirements for the structure, mechanical properties, electrical properties of the coupler" (see Chapter 1).

The following editorial changes have been made to this document.

---In the last line of Table 1, "L23-20" of 347/600 is changed to "L23-30";

--- 23.6 The title "Rewirable plugs and connectors" is inaccurate. This article contains the test content for "non-rewirable plugs and connectors",

Therefore, the title was changed to "Plugs and Connectors";

---Refer to Appendix B of GB/T 13140.1-2008, add Appendix A (informative) The cross-sectional area of the conductor and the use in North America

The approximate relationship between the AWG wire gauge.

Introduction

The purpose of this document is to provide a safe, compact and practical plug and socket system with curved contacts. Taking into account the foundations of all parts of the world

The essential difference between facilities and installation rules includes performance and size requirements.

Plugs, sockets and couplers with curved contacts

1 Scope

This document specifies the technical requirements for the structure, mechanical properties, and electrical properties of plugs, sockets and couplers with arc-shaped contacts.

This document is applicable to environments that are mainly used for commercial purposes, indoor use, and basically no water, and the rated working voltage does not exceed

600V, 50Hz or 60Hz a.c., plugs, sockets, and connectors with standard structure arc contacts with rated currents of 20A and 30A

And appliance input socket (hereinafter referred to as electrical accessories).

This document applies to electrical accessories used when the ambient temperature is usually within the range of -25°C to 40°C. These electrical accessories are only scheduled

Connect with copper or copper alloy cables.

Interchangeability requirements are only defined for electrical accessories with protection class IP20.

Note. The basic conditions for indoor use are based on the limits of IEC 60364-5-51:2005 table T51A and AD1.

Sockets or appliance inlets installed in or fixed to electrical equipment are within the scope of this document.

2 Normative references

The content of the following documents constitutes an indispensable clause of this document through normative references in the text. Among them, dated quotations

Only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

This document.

GB/T 3956 cable conductor (GB/T 3956-2008, IEC 60228:2004, IDT)

GB/T 4208 Enclosure protection grade (IP code) (GB/T 4208-2017, IEC 60529:2013, IDT)

GB/T 5013.4 Rubber insulated cables with rated voltages of 450/750 V and below Part 4. Flexible wires and flexible cables