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

GB/T 13536-2018

Replacing GB/T 13536-1992

Connectors for aircraft ground electrical supplies

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard supersedes GB/T 13536-1992 Aircraft ground power connector, which is a major change from GB/T 13536-1992

as follows.

--- Deleted the original Chapter 3 "plane ground power connector" term, added 3.1 "fixed aircraft connector" and 3.2 "terrestrial power supply

Free Connector terminology;

--- Deleted the original 4.1 basic type, 4.2 end connection type, 4.3 product model, 4.4 rated voltage, rated current and contact even number;

--- Remove the original Chapter 5 technical requirements, according to ISO 461-1.2003 increase Chapter 4 design and performance requirements;

--- Delete the original Chapter 6 test methods, Chapter 7 inspection rules, according to ISO 461-1.2003 increase Chapter 5 inspections and tests;

--- Delete the original Chapter 8 signs, packaging, transportation, storage, according to ISO 461-1.2003 increase Chapter 6 product identification and ordering procedures;

--- Delete the original Chapter 9 Quality Assurance Period.

This standard uses the redrafted law to modify the use of ISO 461-1.2003 "plane ground power connector Part 1. Design, performance and

"Test Requirements" and ISO 461-2.1985 "Aircraft Terrestrial Power Connectors Part 2. Dimensions".

Compared with ISO 461-1.2003 and ISO 461-2.1985, the structure is adjusted as follows.

--- Replace "5.3.1.1 Types 1, 2, and 3" in ISO 461-1.2003 with "5.3.1.1 Test Procedures" and "5.3.1.2 Types 1, 2, and 3".

"5.3.1.2 Type 4" was changed to "5.3.1.3 Type 4".

--- Adjusted Chapter 1 of ISO 461-2.1985 to 7.1, Chapter 4 adjusted to 7.2, deleted Chapters 2 and 3.

This standard also made the following editorial changes.

---4.1.5 increase "Note. 105 °C for ambient temperature heating rise";

--- Added "ISO 7137" (source of the figure) to ISO 9001-1.2003 5.3.7 before Figure 8-5 and Figure 8-6.

This standard was proposed by China Aviation Industry Corporation.

This standard is under the jurisdiction of the National Aircraft Standardization Technical Committee (SAC/TC435).

This standard was drafted by. Shenyang Xinghua Aviation Electrical Appliance Co., Ltd., Anhui Zhiyi Technology Consulting Co., Ltd., China Aviation Comprehensive Technology Institute of Technology, Chinese People's Liberation Army station in one of the seventeen military representative office.

1 Scope

This standard specifies the design requirements, performance requirements, test methods and connectors for aircraft ground power connectors (hereinafter referred to as connectors). size.

This standard applies to aircraft ground power connectors.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

ISO 7137 Aircraft Airborne Equipment Environmental Conditions and Test Methods (Aircraft-Environmentalconditionsandtest)

Proceduresforairborneequipment)

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1

Aircraft fixed connector (socket) aircraft fixed connector (receptacle)

The connector mounted on the aircraft receives an external power supply to the aircraft via a ground power free connector.

3.2

Ground Power Free Connector (Plug) ground supply free connector (plug)

The connector installed on the external ground power cable mates with the fixed connector of the aircraft to supply power to the aircraft.

4.1.1 Structure

The plug structure should be firm, with a certain degree of mechanical strength, able to withstand mechanical vibration and wear during use, and ensure safe operation.

No sharp edges.

4.1.2 Antifungal

The materials used for sockets and plugs should be mildewproof.

4.1.3 Metallic Materials

The metal used should be corrosion-resistant or corrosion-resistant.

4.1.4 Incompatible materials

When incompatible materials are used in direct contact, they shall be protected against electrolytic corrosion.