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

GB/Z 33588.8-2022

**Lightning protection system components (LPSC) - Part 8:
Requirements for components for isolated LPS**

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Standardization Administration**

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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"

drafted.

This document is part 8 of GB/T (Z) 33588 "Lightning Protection System Components (LPSC)". GB/T (Z) 33588 has been released

The following parts.

- Part 1. Requirements for connectors;
- Part 2. Requirements for air-terminations, down conductors and grounding electrodes;
- Part 3. Requirements for isolation discharge gaps (ISG);
- Part 4. Fastener requirements for conductors;
- Part 5. Requirements for grounding electrode detection boxes and grounding electrode seals;
- Part 6. Requirements for lightning strike counters (LSC);
- Part 7. Requirements for grounding resistance-reducing materials;
- Part 8. Requirements for isolation components of lightning protection systems.

This document is equivalent to IEC TS62561-8:2018 "Lightning Protection System Components (LPSC) Part 8. Lightning Protection System Isolation"

Parts Requirements", the document type is adjusted from IEC technical specifications to my country's national standardization guiding technical documents.

The following editorial changes have been made to this document.

---According to the citation method of the text, the normative referenced document IEC 62561-2 is supplemented in the list of normative references in Chapter 2, and the

ISO 4892-3:2016 adjusted to references;

--- Corrected the error of the column item in 5.7.6, corrected the number of the column item "d) test procedure" to 5.7.7, and revised the column item e)~i) to 5.7.7

Items a)~e), the original numbers of 5.7.7~5.7.9 are extended in turn.

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

GB/T (Z) 33588 aims to establish the various requirements for lightning protection systems (LPS) designed and installed according to the IEC 62305 series of standards.

The requirements and test methods for this component are to be composed of eight parts.

--- Part 1. Requirements for connectors. Establishes requirements and test methods for metallic connectors that form part of lightning protection systems.

--- Part 2. Requirements for air terminals, down conductors and earth electrodes. Metal conductors (not "self-

"Conductor") and the requirements and test methods for the metallic earth electrodes constituting the earthing device.

--- Part 3. Requirements for isolation discharge gaps (ISG). Establishes requirements and tests for isolation discharge gaps for lightning protection systems method.

--- Part 4. Fastener requirements for conductors. Gold for securing and supporting conductors such as air terminals, down conductors and grounding systems is established.

Requirements and test methods for metallic, non-metallic, and composite fasteners.

--- Part 5. Requirements for grounding electrode detection boxes and grounding electrode seals. Established the ground electrode detection box (terminal box) and the ground electrode density

Requirements and test methods for seals.

--- Part 6. Lightning strike counter (LSC) requirements. Requirements and test methods for lightning strike counters are established.

--- Part 7. Requirements for grounding resistance-reducing materials. The requirements and test methods for grounding resistance-reducing materials in lightning protection systems are established.

--- Part 8. Requirements for isolation components of lightning protection systems.

Established insulation brackets and insulation down conductors and their special fasteners
Requirements and test methods.

Lightning Protection System Components (LPSC)

Part 8.Requirements for isolation components of lightning protection systems

1 Scope

This document specifies the requirements and test methods for insulating supports and insulating down conductors and their special fasteners. Insulating brackets cooperate with air-termination and

Use down conductors to maintain proper separation distance; insulated down conductors can reduce the separation distance.

This document does not cover testing of insulating supports and insulating down conductors for use in explosive atmospheres.

Performance requirements and test methods for other types of isolation components of lightning protection systems are under study.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations

documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

GB/T 2423.18-2021 Environmental Testing Part 2.Test Method Test Kb. Salt Spray, Alternating (Sodium Chloride Solution)

(IEC 60068-2-52.2017, IDT)

GB/T 9789-2008 Sulfur dioxide corrosion test of metals and other inorganic coatings under normal condensation conditions (ISO 6988.

1985, IDT)

GB/T 33588.1-2020 Lightning Protection System Components (LPSC) Part 1.Requirements for Connectors (IEC 62561-1.2017,

IDT)

ISO 4892-2 Plastics laboratory light source exposure test methods - Part 2.Xenon arc lamp (Plastics-Methods of exposure

Note. GB/T 16422.2-2022 Plastics Laboratory Light Source Exposure Test Method Part 2.Xenon Arc Lamp (ISO 4892-2.2013, IDT)

ISO 4892-4 Plastics-Test methods for exposure to laboratory light sources-Part 4.Open carbon arc lamps (Plastics-Methodsof

Note. GB/T 16422.4-2022 Plastics Laboratory Light Source Exposure Test Method Part 4.Open Carbon Arc Lamp (ISO 4892-4.2013, IDT)

rosionresistance)

Note. GB/T 16927.2-2013 High Voltage Test Technology Part 2.Measurement System (IEC 60060-2.2010, MOD)

IEC 60068-2-75.2014 Environmental Testing Part 2-75.Test Method Test Eh. Hammer Test (Environmental

Note. GB/T 2423.55-2006 Environmental Testing of Electrical and Electronic Products Part 2.Test Method Test Eh. Hammer Test (IEC 60068-2-75.

1997, IDT)

Note. GB/T 16896.1-2005 High Voltage Impulse Measuring Instruments and Software Part 1.Requirements for Instruments (IEC 61083.2001, MOD)

IEC 61083-2 Measuring instruments and software for high voltage and high current tests - Part 2.For impulse voltage and impulse current tests