Lightning protection system components (LPSC) - Part 4: Requirements for conductor fasteners

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Lightning protection system components (LPSC) - Part 4: Requirements for conductor fasteners (IEC 62561-4:2023)

Composants des systèmes de protection contre la foudre (CSPF) - Partie 4: Exigences pour les fixations de conducteurs (IEC 62561-4:2023)

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European foreword

The text of document 81/734/FDIS, future edition 3 of IEC 62561-4, prepared by IEC/TC 81 "Lightning protection" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62561-4:2023.

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IEC 62305-1 NOTE Approved as EN 62305-1

IEC 62305-4 NOTE Approved as EN 62305-4

IEC 62561-4:2017 NOTE Approved as EN 62561-4:2017 (not modified)



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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Lightning protection system components (LPSC) – Part 4: Requirements for conductor fasteners

Composants des systèmes de protection contre la foudre (CSPF) – Partie 4: Exigences pour les fixations de conducteurs





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Edition 3.0 2023-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Lightning protection system components (LPSC) – Part 4: Requirements for conductor fasteners

Composants des systèmes de protection contre la foudre (CSPF) – Partie 4: Exigences pour les fixations de conducteurs

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LIGHTNING PROTECTION SYSTEM COMPONENTS (LPSC) -

Part 4: Requirements for conductor fasteners

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IEC 62561-4 has been prepared by IEC technical committee 81: Lightning protection. It is an International Standard.

This third edition cancels and replaces the second edition published in 2017. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) alignment with the latest edition of ISO IEC 60068-2-52:2017 relating to salt mist atmosphere treatment;
- b) alignment with the new edition of ISO 22479:2019 relating to humid sulphurous atmosphere treatment;
- c) new normative annex for the applicability of previous tests.

The text of this International Standard is based on the following documents:

Draft	Report on voting
81/734/FDIS	81/740/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all the parts in the IEC 62561 series, published under the general title *Lightning* protection system components (LPSC), can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

INTRODUCTION

PSC atem (L) This part of IEC 62561 deals with the requirements and tests for lightning protection system components (LPSC), specifically conductor fasteners used for the installation of a lightning protection system (LPS) designed and implemented in accordance with the IEC 62305 series.

LIGHTNING PROTECTION SYSTEM COMPONENTS (LPSC) -

Part 4: Requirements for conductor fasteners

1 Scope

This part of IEC 62561 deals with the requirements and tests for metallic and non-metallic conductor fasteners that are used to retain and support the air-termination, down-conductor and earth-termination systems.

This document does not cover the fixing of conductor fasteners to the fabric of structures due to the vast number and types used in modern day construction.

Testing of components for an explosive atmosphere is not covered by this document. Extra requirements for the components can be necessary for LSCs intended for use in hazardous atmospheres.

NOTE In CENELEC member countries, testing requirements of components for explosive atmospheres are specified in CLC/TS 50703-2.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-2-52:2017, Environmental testing – Part 2-52: Tests – Test Kb: Salt mist, cyclic (sodium chloride solution)

IEC 60068-2-75:2014, Environmental testing - Part 2: Tests - Test Eh: Hammer tests

IEC 62305-3:2010, Protection against lightning – Part 3: Physical damage to structures and life hazard

IEC 62561-1, Lightning protection system components (LPSC) – Part 1: Requirements for connection components

ISO 4892-2, Plastics – Methods of exposure to laboratory light sources – Part 2: Xenon – arc lamps

ISO 4892-3:2016, Plastics – Methods of exposure to laboratory light sources – Part 3: Fluorescent UV lamps

ISO 4892-4, Plastics – Methods of exposure to laboratory light sources – Part 4: Open-flame carbon-arc lamps

ISO 6957:1988, Copper alloys – Ammonia test for stress corrosion resistance

ISO 22479:2019, Corrosion of metals and alloys – Sulfur dioxide test in a humid atmosphere (fixed gas method)