Lightning protection system components (LPSC) - Part 5: Requirements for earth electrode inspection housings and earth electrode seals

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ICS 29.020, 91.120.40

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Lightning protection system components (LPSC) - Part 5: Requirements for earth electrode inspection housings and earth electrode seals (IEC 62561-5:2023)

Composants des systèmes de protection contre la foudre (CSPF) - Partie 5: Exigences pour les regards de visite et les joints des électrodes de terre (IEC 62561-5:2023)

Blitzschutzsystembauteile (LPSC) - Teil 5: Anforderungen an Revisionskästen und Erderdurchführungen (IEC 62561-5:2023)

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European foreword

The text of document 81/738/FDIS, future edition 3 of IEC 62561-5, prepared by IEC/TC 81 "Lightning protection" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62561-5:2024.

The following dates are fixed:

•	latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop) 2024-10-09
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In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 62305 (series) NOTE Approved as EN 62305 (series)

IEC 62561-5

Edition 3.0 2023-12

INTERNATIONAL STANDARD

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Composants des systèmes de protection contre la foudre (CSPF) – Partie 5: Exigences pour les regards de visite et les joints des électrodes de terre

IEC 62561-5:2023-12(en-fr)

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LIGHTNING PROTECTION SYSTEM COMPONENTS (LPSC) –

Part 5: Requirements for earth electrode inspection housings and earth electrode seals

FOREWORD

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IEC 62561-5 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) A classification of earth electrode seals has been added.

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

Draft	Report on voting
81/738/FDIS	81/753/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 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

This part of IEC 62561 deals with the requirements and tests for lightning protection system components (LPSC), specifically earth electrode inspection housings and earth electrode seals, used for the installation of a lightning protection system (LPS) designed and implemented according to the IEC 62305 series [1][1].

[1] Numbers in square brackets refer to the Bibliography.

LIGHTNING PROTECTION SYSTEM COMPONENTS (LPSC) –

Part 5: Requirements for earth electrode inspection housings and earth electrode seals

1 Scope

This part of IEC 62561 specifies the requirements and tests for earth electrode inspection housings (earth housings) installed in the earth and for earth electrode seals.

Lightning protection system components (LPSC) can also be suitable for use in hazardous atmospheres. For this reason, there are additional requirements when installing the components under such conditions.

NOTE Different requirements and test procedures are given in the EN 124 series [2] and the EN 1253 series [3].

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at https://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp

3.1
earth electrode inspection housing
metallic or non-metallic enclosure that houses the down conductor and earth termination connection for inspection and testing purposes and consists of a housing and a removable lid

3.2
earth electrode seal
water pressure seal used in conjunction with an earth electrode that passes through or enters the foundation or wall of the building, preventing ground water from entering the building

3.3
earth electrode
part or group of parts of the earth termination system which provides direct electrical contact with and disperses the lightning current to the earth

EXAMPLE Earth rods, earth conductors and earth plates.