
Elementi za zaščito pred strelo (LPSC) - 8. del: Zahteve za elemente električno izoliranega sistema LPS (IEC 62561-8:2026)

Lightning protection system components (LPSC) - Part 8: Requirements for components for electrically insulated LPS

Blitzschutzsystembauteile (LPSC) - Teil 8: Anforderungen an Bauteile für ein elektrisch isoliertes Blitzschutzsystem (LPS) (IEC 62561-8:2026)

Composants de système de protection contre la foudre (CSPF) - Partie 8: Exigences pour les composants de système isolé de protection contre la foudre (IEC 62561-8:2026)

Ta slovenski standard je istoveten z: **EN IEC 62561-8:2026**

ICS:

91.120.40	Zaščita pred strelo	Lightning protection
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NORME EUROPÉENNE
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EN IEC 62561-8

August 2026

ICS 29.020; 91.120.40

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**Lightning protection system components (LPSC) - Part 8:
Requirements for components for electrically insulated LPS
(IEC 62561-8:2026)**

Composants des systèmes de protection contre la foudre
(CSPF) - Partie 8: Exigences pour les composants de
système électriquement isolé de protection contre la foudre
(IEC 62561-8:2026)

Blitzschutzsystembauteile (LPSC) - Teil 8: Anforderungen
an Bauteile für ein elektrisch isoliertes Blitzschutzsystem
(LPS)
(IEC 62561-8:2026)

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Europäisches Komitee für Elektrotechnische Normung

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EN IEC 62561-8:2026 (E)**European foreword**

The text of document 81/806/FDIS, future edition 1 of IEC 62561-8, prepared by TC 81 "Lightning protection" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62561-8:2026.

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) 2027-08-31
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2029-08-31

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In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 62305 (series)	NOTE Approved as EN IEC 62305 (series)
IEC 62305-1:2024	NOTE Approved as EN IEC 62305-1:2024 (not modified)
IEC 62305-2:2024	NOTE Approved as EN IEC 62305-2:2024 (not modified)
IEC 62305-4:2024	NOTE Approved as EN IEC 62305-4:2024 (not modified)
IEC 61034 (series)	NOTE Approved as EN 61034 (series)

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60060-2	2025	High-voltage test techniques - Part 2: Measuring systems	EN IEC 60060-2	2025
IEC 60068-2-52	2017	Environmental testing - Part 2-52: Tests - Test Kb: Salt mist, cyclic (sodium chloride solution)	EN IEC 60068-2-52	2018
IEC 60068-2-75	2014	Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	2014
IEC 61083-1	-	Instruments and software used for measurements in high-voltage and high-current tests - Part 1: Requirements for instruments for impulse tests	EN 61083-1	-
IEC 61083-2	-	Instruments and software used for measurement in high-voltage and high-current tests - Part 2: Requirements for software for tests with impulse voltages and currents	EN 61083-2	-
IEC 62305-3	-	Protection against lightning - Part 3: Physical damage to structures and life hazard	EN IEC 62305-3	-
IEC 62561-1	2023	Lightning protection system components (LPSC) - Part 1: Requirements for connection components	EN IEC 62561-1	2023
IEC 62561-2	2025	Lightning protection system components (LPSC) - Part 2: Requirements for conductors and earth electrodes	EN IEC 62561-2	2025
IEC 62561-4	-	Lightning protection system components (LPSC) - Part 4: Requirements for conductor fasteners	EN IEC 62561-4	-
ISO 4892-2	-	Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps	EN ISO 4892-2	-
ISO 4892-3	2024	Plastics - Methods of exposure to laboratory light sources - Part 3: Fluorescent UV lamps	EN ISO 4892-3	2024

EN IEC 62561-8:2026 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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)	EN ISO 22479	2022

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IEC 62561-8

Edition 1.0 2026-06

INTERNATIONAL STANDARD

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

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

Lightning protection system components (LPSC) - Part 8: Requirements for components for electrically insulated LPS

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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IEC 62561-8 has been prepared by IEC technical committee 81: Lightning protection. It is an International Standard.

This first edition cancels and replaces IEC TS 62561-8 published in 2018. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC TC 62561-8:2018:

- a) title and scope of the standard has been adjusted;
- b) the document has been updated in line with IEC 60068-2-52:2017 on salt mist treatment;
- c) the document has been updated in line with ISO 22479:2019 on humid sulphureous atmosphere treatment;
- d) two different possible example configurations for pull out tests have been introduced;
- e) additional information on pollution has been included;

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- f) an alternate test arrangement for high voltage impulse test has been included;
- g) a new normative Annex H for applicability of previous tests has been introduced;
- h) pass criteria for high voltage impulse testing updated;
- i) explanation on high voltage impulse testing with negative polarity has been added.

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

Draft	Report on voting
81/806/FDIS	81/808/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 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.

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INTRODUCTION

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

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¹ Numbers in square brackets refer to the Bibliography.

1 Scope

This document specifies the requirements and tests for components used for electrically insulated LPS. These components, which can reduce the separation distance, are as follows:

- insulating stand-offs, used in conjunction with an air-termination system and down-conductors with the aim of maintaining the proper separation distance;
- insulating down-conductors, including their specific fasteners.

Testing of insulating stand-offs and insulating down-conductor components for an explosive atmosphere is not covered by this document.

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 60060-2:2025, *High-voltage test techniques - Part 2: Measuring systems*

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 2-75: Tests - Test Eh: Hammer tests*

IEC 61083-1, *Instruments and software used for measurements in high-voltage and high-current tests - Part 1: Requirements for instruments for impulse tests*

IEC 61083-2, *Instruments and software used for measurement in high-voltage and high-current tests - Part 2: Requirements for software for tests with impulse voltages and currents*

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

IEC 62561-1:2023, *Lightning protection system components (LPSC) - Part 1: Requirements for connection components*

IEC 62561-2:2025, *Lightning protection system components (LPSC) - Part 2: Requirements for conductors and earth electrodes*

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

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

ISO 4892-3:2024, *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)*

3 Terms and definitions

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

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

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

3.1

insulating stand-off

non-metallic or composite component, consisting of the insulator and fixation parts, designed to retain, support and insulate the air-termination system or down-conductors at a required separation distance

3.2

effective length correction factor

k_x

factor evaluating the different withstand voltages of air gaps and insulators under test voltages

3.3

steepness correction factor

c_{is_st}

<insulating stand-off> factor considering the effect of higher steepness and the probability of occurrence of subsequent negative short strokes on the disruptive voltage of an insulating stand-off

Note 1 to entry: The value is defined in the test procedure.

3.4

effective length

l_{eff}

<insulating stand-off> length (distance) of an air gap with equivalent breakdown behaviour to an insulating stand-off

3.5

insulating length

l_{st}

<insulating stand-off> shortest measured clearance distance between two conductive elements of different electrical potential, for example between a metallic conductor fastener and a mounting assembly

3.6

equivalent separation distance

s_e

corrected distance value to be used instead of the insulating length of a stand-off distance value equivalent to the separation distance of conventional down-conductors required in IEC 62305-3