

Lightning protection system components (LPSC) - Part
1: Requirements for connection components

EESTI STANDARDI EESSÕNA

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

Composants des systèmes de protection contre la foudre
(CSPF) - Partie 1: Exigences pour les composants de
connexion
(IEC 62561-1:2023)

Blitzschutzsystembauteile (LPSC) - Teil 1: Anforderungen
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IEC 62305 (series) NOTE Approved as EN 62305 (series)

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Lightning protection system components (LPSC) –
Part 1: Requirements for connection components**

**Composants des systèmes de protection contre la foudre (CSPF) –
Partie 1: Exigences pour les composants de connexion**



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INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Lightning protection system components (LPSC) –
Part 1: Requirements for connection components**

**Composants des systèmes de protection contre la foudre (CSPF) –
Partie 1: Exigences pour les composants de connexion**

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CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references	7
3 Terms and definitions	7
4 Classification.....	11
4.1 According to the ability to withstand lightning current.....	11
4.2 According to the installation location.....	11
4.3 According to the mechanical behaviour of connection components	11
4.4 According to whether or not a connection is permanent	11
5 Requirements	11
5.1 General.....	11
5.2 Documentation and installation instructions	11
5.3 Marking.....	12
5.3.1 Content of marking	12
5.3.2 Durability and legibility.....	12
5.4 Lightning current carrying capability.....	12
5.5 Static mechanical withstand capability	12
5.6 Permanent connection	12
5.7 Non-permanent connection	13
5.8 Dismantling of test joints.....	13
5.9 Expansion piece	13
6 Tests	13
6.1 General test conditions	13
6.2 Documentation and installation instructions	14
6.2.1 General test conditions	14
6.2.2 Acceptance criteria	14
6.3 Marking test.....	14
6.3.1 General test conditions	14
6.3.2 Acceptance criteria	14
6.4 Preparation of the specimen	14
6.5 Conditioning and ageing	19
6.6 Electrical test.....	19
6.6.1 General test conditions	19
6.6.2 Acceptance criteria	20
6.7 Static mechanical withstand-capability test	21
7 Electromagnetic compatibility (EMC)	21
8 Structure and content of the test report.....	22
8.1 General.....	22
8.2 Report identification.....	22
8.3 Specimen description.....	22
8.4 Conductor	22
8.5 Standards and references	23
8.6 Test procedure.....	23
8.7 Testing equipment description	23
8.8 Measuring instruments description.....	23

8.9	Results and parameters recorded	23
8.10	Statement of pass or fail	23
Annex A (normative)	Summary of the requirements and corresponding tests	24
Annex B (informative)	Typical connection arrangements for various LPSC	25
Annex C (normative)	Flow chart of tests for connection components	26
Annex D (normative)	Conditioning and ageing for connection components	27
D.1	General	27
D.2	Salt mist treatment	27
D.3	Humid sulphurous atmosphere treatment	27
D.4	Ammonia atmosphere treatment	27
Annex E (normative)	Reduced test procedures	28
Bibliography	29
Figure 1	– Basic arrangement of specimen with cross-connection component	15
Figure 2	– Basic arrangement of specimen with parallel connection component	16
Figure 3	– Basic arrangement of specimen with expansion piece or bridging component	17
Figure 4	– Basic arrangement of specimen with equipotential bonding bar	18
Figure 5	– Basic arrangement of specimen with clamped connection of reinforcing rods	18
Figure 6	– Basic arrangement of specimen with welded, brazed or exothermic connections of reinforcing rods	19
Figure 7	– Basic arrangement for contact measurement of expansion piece or bridging component	20
Figure 8	– Examples of sequence of loosening of bolts and screws	21
Figure B.1	– Typical arrangements for various LPSC	25
Figure C.1	– Flowchart of tests for connection components	26
Table 1	– Lightning impulse current (I_{imp}) parameters	20
Table A.1	– Requirements and corresponding tests	24
Table E.1	– Reduced test procedures for connection components complying with IEC 62561-1:2017 or IEC 62561-1:2012	28

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IEC 62561-1 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) definitions of connection types mentioned in the scope have been added;
- b) location classification has been expanded in detail;
- c) the document has been updated in line with the new edition of ISO 22479:2019 on humid sulphurous atmosphere treatment;
- d) a new normative Annex E for reduced test procedures has been introduced.

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

Draft	Report on voting
81/721/FDIS	81/724/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.

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INTRODUCTION

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

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LIGHTNING PROTECTION SYSTEM COMPONENTS (LPSC) –

Part 1: Requirements for connection components

1 Scope

This part of IEC 62561 specifies the requirements and tests for metallic connection components that form part of a lightning protection system (LPS). Typically, these can be connectors, clamps, bonding and bridging components, expansion pieces and test joints.

For the purposes of this document the following connection types are considered as connection components: exothermic, brazing, welding, clamping, crimping, seaming, screwing or bolting.

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

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

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 terminology 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

connection component

part of an external LPS which is used for the connection of conductors to each other or to metal installations

EXAMPLE Examples of connection components are given in Clause 1.