

Lightning Protection System Components (LPSC) - Part
3: Requirements for isolating spark gaps (ISG)

EESTI STANDARDI EESSÕNA

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ICS 29.020, 91.120.40

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English Version

**Lightning Protection System Components (LPSC) - Part 3:
Requirements for isolating spark gaps (ISG)
(IEC 62561-3:2017)**

Composants des systèmes de protection contre la foudre
(CSPF) - Partie 3: Exigences pour les éclateurs d'isolement
(IEC 62561-3:2017)

Blitzschutzsystembauteile (LPSC) - Teil 3: Anforderungen
an Trennfunkengestrecken
(IEC 62561-3:2017)

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Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of document 81/561/FDIS, future edition 2 of IEC 62561-3, prepared by IEC/TC 81, "Lightning protection", was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62561-3:2017.

The following dates are fixed:

- | | | |
|---|-------|------------|
| – latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2018-04-20 |
| – latest date by which the national standards conflicting with this document have to be withdrawn | (dow) | 2020-07-20 |

This document supersedes EN 62561-3:2012.

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Endorsement notice

The text of the International Standard IEC 62561-3:2017 was approved by CENELEC as a European Standard without any modification.

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

IEC 60529	NOTE	Harmonized as EN 60529.
IEC 62305-3	NOTE	Harmonized as EN 62305-3.
IEC 62305-4	NOTE	Harmonized as EN 62305-4.
IEC 61643-11	NOTE	Harmonized as EN 61643-11.
IEC 62305-1	NOTE	Harmonized as EN 62305-1.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When 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 60068-2-52	1996	Environmental testing -- Part 2-52: Tests -EN 60068-2-52 Test Kb: Salt mist, cyclic (sodium chloride solution)		1996
IEC 60068-2-75	1997	Environmental testing -- Part 2-75: Tests -EN 60068-2-75 Test Eh: Hammer tests		1997
IEC 62561-1	-	Lightning protection system components (LPSC) -- Part 1: Requirements for connection components	EN 62561-1	-
ISO 4892-2	2006	Plastics - Methods of exposure to laboratory light sources - Part-2: Xenon-arc lamps		-
ISO 4892-3	2006	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	-	Copper alloys -- Ammonia test for stress-corrosion resistance		-
ISO 6988	1985	Metallic and other non-organic coatings -EN ISO 6988 Sulfur dioxide test with general condensation of moisture		1994

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INTRODUCTION

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

LIGHTNING PROTECTION SYSTEM COMPONENTS (LPSC) –

Part 3: Requirements for isolating spark gaps (ISG)

1 Scope

This part of IEC 62561 specifies the requirements and tests for isolating spark gaps (ISG) for lightning protection systems.

ISGs can be used to indirectly bond a lightning protection system to other nearby metalwork where a direct bond is not permissible for functional reasons.

Typical applications include the connection to

- earth-termination systems of power installations,
- earth-termination systems of telecommunication systems,
- auxiliary earth electrodes of voltage-operated, earth fault circuit breakers,
- rail earth electrode of power and DC railways,
- measuring earth electrodes for laboratories,
- installations with cathodic protection and stray current systems,
- service entry masts for low-voltage overhead cables,
- bypassing insulated flanges and insulated couplings of pipelines.

This does not cover applications where follow currents occur.

NOTE Lightning protection system components (LPSC) can also be suitable for use in hazardous conditions such as fire and explosive atmosphere. Due regard will be taken of the extra requirements necessary for the components to be installed in such conditions.

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 60068-2-52:1996, *Environmental testing – Part 2-52: Tests – Test Kb: Salt mist, cyclic (sodium chloride solution)*¹

IEC 60068-2-75:1997, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*²

¹ 2nd edition (1996). A 3rd edition IEC 60068-2-52: *Environmental testing – Part 2-52: Tests – Test Kb: Salt mist, cyclic (sodium chloride solution)* is under preparation. Stage at the time of publication: IEC PRVC 60068-2-52:2017.

² 1st edition (1997). This 1st edition was replaced in 2014 by a 2nd edition IEC 60068-2-75:2014, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*.