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Lightning protection system components (LPSC) – Part 2: Requirements for conductors and earth electrodes

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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LIGHTNING PROTECTION SYSTEM COMPONENTS (LPSC) -

Part 2: Requirements for conductors and earth electrodes

FOREWORD

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International Standard IEC 62561-2 has been prepared by IEC technical committee 81: Lightning protection.

The text of this standard is based on the following documents:

FDIS	Report on voting
81/417/FDIS	81/423/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The content of this document is taken from the European Standard EN 50164-2.

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 publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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 of standards.

LIGHTNING PROTECTION SYSTEM COMPONENTS (LPSC) -

Part 2: Requirements for conductors and earth electrodes

1 Scope

This part of IEC 62561 specifies the requirements and tests for:

- metallic conductors (other than "natural" conductors) that form part of the air termination system and down conductors;
- metallic earth electrodes that form part of the earth termination system.

2 Normative references

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.

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

IEC 60228, Conductors of insulated cables

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

IEC 62305-4, Protection against lightning – Part 4: Electrical and electronic systems within structures

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

ISO 1460, Metallic coatings – Hot dip galvanized coatings on ferrous materials – Gravimetric determination of the mass per unit area

ISO 1461, Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods

ISO 2178, Non-magnetic coatings on magnetic substrates – Measurement of coating thickness – Magnetic method

ISO 6892-1:2009, Metallic materials – Tensile testing – Part 1: Method of test at room temperature

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

ISO 6988:1985, Metallic and other non-organic coatings – Sulphur dioxide test with general condensation of moisture