Irish Standard
I.S. EN 50164-4:2008

Lightning Protection Components (LPC) -- Part 4: Requirements for conductor fasteners

I.S. EN 50164-4:2008

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English version

Lightning Protection Components (LPC) - Part 4: Requirements for conductor fasteners

Composants de protection contre la foudre (CPF) - Partie 4: Prescriptions pour les fixations de conducteur

Blitzschutzbauteile - Teil 4: Anforderungen an Halter

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 81X, Lightning protection.

The text of the draft was submitted to the Unique Acceptance procedure and was approved by CENELEC as EN 50164-4 on 2008-04-01.

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2009-04-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2011-04-01

EN 50164 is a family standard and consists of the following parts under the generic title *"Lightning Protection Components (LPC)":*

Part 1	Requirements for connection components
Part 2	Requirements for conductors and earth electrodes
Part 3	Requirements for isolating spark gaps
Part 4	Requirements for conductor fasteners
Part 5 [1)]	Requirements for earth electrode inspection housings and earth electrode seals
Part 6 [1)]	Requirements for lightning strike counters
Part 7	Requirements for earthing enhancing compounds

[1)] In preparation.

Contents

1 Scope

This European standard specifies requirements and tests for:

– metallic and non-metallic conductor fasteners that are used in conjunction with the air termination system and down conductors;

– fixing of fasteners to the fabric / membrane / gravel roofing of structures is not covered by this standard due to the vast number and types used in modern day construction.

LPC may also be suitable for use in hazardous atmospheres. Regard should then be taken of the extra requirements necessary for the components to be installed in such conditions.

2 Normative references

The following referenced documents are indispensable for the application 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.

EN 60068-2-52	1996	Environmental testing – Part 2: Tests - Test Kb: Salt mist, cyclic (sodium chloride solution) (IEC 60068-2-52:1996)
EN 62305-3	2006	Protection against lightning – Part 3: Physical damage to structures and life hazard (IEC 62305-3:2006, mod.)
EN ISO 4892-2	2006	Plastics – Methods of exposure to laboratory light sources – Part 2: Xenon-arc lamps (ISO 4892-2:2006)
EN ISO 6988	1994	Metallic and other non-organic coatings – Sulfur dioxide test with general condensation of moisture (ISO 6988:1985)
ISO 4892-4	2004	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

3 Definitions

For the purpose of this European Standard, the following definitions apply.

3.1
conductor fastener
a metallic, non-metallic or composite component designed to retain and support the air termination and down conductor, installed at intervals along the length of the conductors

NOTE The conductor fastener may be provided with a means of attachment to a mounting surface.

4 Classification

Conductor fasteners are classified:

4.1 According to the material composition

4.1.1 Metallic (e.g. hot dip galvanized steel, copper, aluminium, stainless steel)

4.1.2 Non-metallic (e.g. PVC, plastics)

4.1.3 Composite (combination of metal and plastic)

4.2 According to fixing arrangement of the conductor within the fastener

4.2.1 With screws

4.2.2 Without screws (e.g. clips, springs)