



BSI Standards Publication

## Lightning Protection System Components (LPSC)

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Part 2: Specific testing requirements for LPS components used in explosive atmospheres

## National foreword

This Published Document is the UK implementation of CLC/TS 50703-2:2020.

The UK participation in its preparation was entrusted to Technical Committee GEL/81, Protection against lightning.

A list of organizations represented on this committee can be obtained on request to its committee manager.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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**CLC/TS 50703-2**

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English Version

**Lightning Protection System Components (LPSC) - Part 2:  
Specific testing requirements for LPS components used in  
explosive atmospheres**

Composants des systèmes de protection contre la foudre  
(CSPF) - Part 2: Exigences d'essais spécifiques relatives  
aux composants des SPF utilisés dans les atmosphères  
explosives

Blitzschutzsystembauteile (LPSC) - Teil 2: Besondere  
Prüfanforderungen an Blitzschutzsystembauteile zur  
Verwendung in explosionsgefährdeten Bereichen

This Technical Specification was approved by CENELEC on 2020-11-09.

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European Committee for Electrotechnical Standardization  
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Europäisches Komitee für Elektrotechnische Normung

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**CLC/TS 50703-2:2020 (E)**

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## **European foreword**

This document (CLC/TS 50703-2:2020) has been prepared by CLC/TC 81X "Lightning protection".

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

## 1 Scope

This document defines the requirements and tests relevant to Lightning Protection System Components suitable for explosive atmospheres (Ex-LPSC).

NOTE This document does not consider EX-LPS Components certified according to EN 60079 series. If a product has already been tested according to ATEX, it does not have to be tested again according to CLC/TS 50703-2.

## 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.

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

EN 62561-1:2017, *Lightning Protection System Components (LPSC) - Part 1: Requirements for connection components* (IEC 62561-1:2017)

EN 62561-2, *Lightning Protection System Components (LPSC) - Part 2: Requirements for conductors and earth electrodes* (IEC 62561-2)

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

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

EN 62561-6, *Lightning protection system components (LPSC) - Part 6: Requirements for lightning strike counters (LSC)* (IEC 62561-6)

EN IEC 60079-0:2018, *Explosive atmospheres - Part 0: Equipment - General requirements* (IEC 60079-0:2018)

EN ISO 6988:1994, *Metallic and other non-organic coatings - Sulfur dioxide test with general condensation of moisture* (ISO 6988:1985)

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

## 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 <https://www.iso.org/obp>

### 3.1

#### Ex-LPSC

lightning protection system component suitable of being used in explosive atmosphere, such as connection components, conductors, isolating spark gaps, conductor's fasteners, lightning strike counters