SLOVENSKI STANDARD
oSIST prEN 6059-502:2024

01-maj-2024

Aeronavtika - Električni kabli, namestitev - Zaščitne obojke - Preskusne metode - 502. del: Odpornost proti električnim oblokom

Aerospace series - Electrical cables, installation Protection sleeves - Test methods - Part 502: Resistance to electrical arcs

Luft- und Raumfahrt - Elektrische Leitungen, Installation - Schutzschläuche - Prüfverfahren - Teil 502: Lichtbogenfestigkeit

Ta slovenski standard je istoveten z: **prEN 6059-502**

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29.060.20	Kabli	Cables
49.060	Letalska in vesoljska električna oprema in sistemi	Aerospace electric equipment and systems

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English Version

Aerospace series - Electrical cables, installation Protection sleeves - Test methods - Part 502: Resistance to electrical arcs

Luft- und Raumfahrt - Elektrische Leitungen, Installation - Schutzschläuche - Prüfverfahren - Teil 502: Lichtbogenfestigkeit

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee ASD-STAN.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 6059-509:2024) has been prepared by the Aerospace and Defence Industries Association of Europe — Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, prior to its presentation to CEN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 6059-502:2014.

The main changes with respect to the previous edition are as follows:

— EN 6059-502 (P2), 12/2014 — Editorial improvements and update of test method to eliminate the 230 VAC electrical arc, retain only the 115 VAC element and to ensure integrity of adjacent target harness cable after short circuit test. Update of Clause 2 “Normative references”. Addition of Clause 3 “Terms and definitions”.

1 Scope

This document specifies a method of assessing the behaviour of protection sleeves or conduits subject to an external electric arc, at 115 VAC 400 Hz.

This document is expected to be used together with EN 6059-100.

The primary aim of this test is to produce, in a controlled fashion, electric arcs at the immediate vicinity of a protection sleeve or conduit and to examine possible consequences on the surrounding external cables bundle which are adjacent from this protection and are supposed to be maintained in a safe condition. These electric arcs are representative of those, which can occur in service when a typical cable bundle is severely damaged.

In order to optimize thickness and mass of such protection, it is necessary to associate a current limit I_n to each sleeves or conduits construction.

Two levels of prospective fault current are specified for all protection sizes.

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 2350,[1] *Aerospace series — Circuit breakers — Technical specification*

EN 2267-010, *Aerospace series — Cables, electrical, for general purpose — Operating temperatures between -55 °C and 260 °C — Part 010: DR family, single UV laser printable — Product standard*

EN 3475-302, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 302: Voltage proof test*

EN 6059-100, *Aerospace series — Electrical cables, installation — Protection sleeves — Test methods — Part 100: General*

EN 6059-501, *Aerospace series — Electrical cables, installation — Protection sleeves — Test methods — Part 501: Voltage proof test*

A-A-52083,[2] *Specification for tape lacing and tying*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp/

— IEC Electropedia: available at https://www.electropedia.org/

[1] Published as ASD-STAN Standard at the date of publication of this document by AeroSpace and Defence industries Association of Europe — Standardization (ASD-STAN), https://www.asd-stan.org/.

[2] Published by Customer Service, Defense Printing Service Detachment Office, 700 Robbins Ave, Building 4D, Philadelphia PA 19111-5094 USA.