



SLOVENSKI STANDARD SIST EN 3475-511:2004

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Aerospace series - Cables, electrical, aircraft use - Test methods - Part 511: Cable-to-cable abrasion

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Luft- und Raumfahrt - Elektrische Leitungen für Luftfahrtverwendung - Prüfverfahren - Teil 511: Abrieb Leitung gegen Leitung

Série aérospatiale - Câbles électriques a usage aéronautique - Méthodes d'essais - Partie 511: Abrasion câble-a-câble

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Ta slovenski standard je istoveten z: EN 3475-511:2002

ICS:

49.060 Številni sistemi za letalsko opremo in sisteme
Aerospace electric equipment and systems

SIST EN 3475-511:2004

en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 3475-511

June 2002

ICS 49.060

English version

**Aerospace series - Cables, electrical, aircraft use - Test
methods - Part 511: Cable-to-cable abrasion**

Série aérospatiale - Câbles électriques à usage
aéronautique - Méthodes d'essais - Partie 511: Abrasion
câble-à-câble

Luft- und Raumfahrt - Elektrischen Leitungen für Luftfahrt
Verwendung - Prüfverfahren - Teil 511: Abrieb Leitung
gegen Leitung

This European Standard was approved by CEN on 20 January 2002.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Foreword

This document (EN 3475-511:2002) has been prepared by the European Association of Aerospace Manufacturers (AECMA).

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

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2002, and conflicting national standards shall be withdrawn at the latest by December 2002.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom

1 Scope

This standard specifies a procedure for measuring cable-to-cable abrasion resistance.

It shall be used together with EN 3475-100.

2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 3475-100 Aerospace series – Cables, electrical, aircraft use – Test methods – Part 100: General

3 Preparation of specimens

Sufficiently long test specimens are sampled from insulated conductors and are placed on the device described on figure 1. This test defines the deterioration caused by the electrical cable rubbing against another cable in a vibratory environment. This deterioration is revealed by the wear caused of the different materials.

Therefore, this test makes it possible to determine the effect of the roughness of the different insulators used when mixed together in a bundle.

Generally, the test is run on gauge 20 cables.

This test is run at ambient temperature.

4 Apparatus

The principle of the test apparatus principle is described in figure 1.

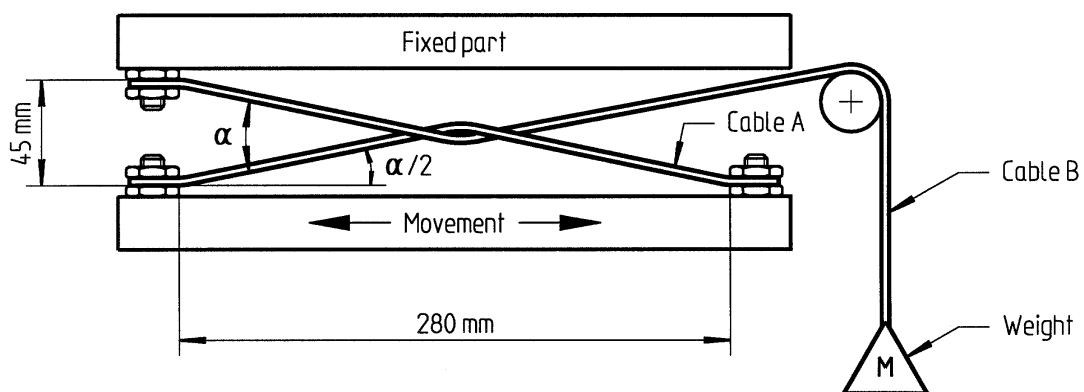


Figure 1

EN 3475-511:2002 (E)

The first cable A shall be installed on a support fixed to an exciter generating $(6,35 \pm 0,25)$ mm dual amplitude 10 HZ vibrations.

The second cable B to be tested shall be suspended from a fixed part and shall be in contact with the first part in compliance with figure 1. A weight holds the cable in tension.

As the contact point is approximately in the middle of cable A, the angle α shall be between 20° and 22° .

This device shall be fitted with a short-circuit detection system, mounted between the two cables being tested, which slaves the operation of a clock.

5 Method

Test samples are installed with weight M, the value of which is specified in the product standard.

A previous test run will make it possible to adjust the distance between the pulley and this weight so as to avoid any possible resonance.

The test can start when the short-circuit detection system is connected and the counter reset to zero.

6 Requirements

The minimum duration between the beginning of the test and stopping caused by triggering of the detection system shall be greater than the value specified in the product standard.

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