

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

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 3475-302:2002 sisaldab Euroopa standardi EN 3475-302:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 12.07.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 3475-302:2002 consists of the English text of the European standard EN 3475-302:2002.</p> <p>This document is endorsed on 12.07.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This standard specifies a method for performing voltage proof tests on finished cables and cables in course of production. It shall be used together with EN 3475-100.</p>	<p>Scope: This standard specifies a method for performing voltage proof tests on finished cables and cables in course of production. It shall be used together with EN 3475-100.</p>
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ICS 49.060

Võtmesõnad: aerospace transport, air transport, aircraft, cables, dielectric strenght, electric cables, electric conductors, electric strength test, electrical, electrical cords, specification (approval), specifications, testing, voltage

ICS 49.060

English version

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

Série aérospatiale - Câbles électriques à usage
aéronautique - Méthodes d'essais - Partie 302: Tenue en
tension (en immersion)

Luft- und Raumfahrt - Elektrische Leitungen für Luftfahrt,
Verwendung - Prüfverfahren - Teil 302:
Spannungsfestigkeit

This European Standard was approved by CEN on 5 August 2001.

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.



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

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Foreword

This document (EN 3475-302:2002) has been prepared by the European Association of Aerospace Manufacturers (AECMA).

After inquiries 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 standards, either by publication of an identical text or by endorsement, at the latest by August 2002, and conflicting national standards shall be withdrawn at the latest by August 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 method of performing voltage proof tests on finished cables and cables in course of production.

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 Immersion test

The specimens, each 15 m long, shall be immersed in the solution so that their ends are at least 150 mm from the surface of the solution. The composition of the solution, at a temperature of between 15 °C and 25 °C, shall be as follows:

- sodium chloride 30 g
- distilled water 1 000 g
- wetting agent 2 g

After immersion for 1 h, the voltage specified by the technical specification with a frequency of 40 Hz to 60 Hz, shall be applied between the conductor of the cable and the screen, if present, or an electrode in contact with the liquid for 5 min.

The voltage rise time shall be between 300 V per second and 500 V per second.

There shall be no perforation of the insulation or jacket.

4 Dry spark test (in production)

All the finished cables shall pass, without flash-over, through the electrode of a suitable dry tester, at the voltage stated in the technical specification at a frequency of 40 Hz to 60 Hz.

The electrode consists of an assembly of small chains or other metallic feelers suitable for making close contact with practically the whole surface of the cable.

The length of the electrode and speed of the cable shall be such that each portion of the insulation or jacket is subjected to the test voltage for at least 0,20 s.

Electrical flaws occurring in the cable shall be removed by cutting out at least 300 mm of the cable on each side of the point of failure.