

Aerospace series - Electrical cables, installation -
Protection sleeves - Test methods - Part 503:
Temperature rise due to rated current injected on the
sleeve

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 6059-503:2017 sisaldab Euroopa standardi EN 6059-503:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 6059-503:2017 consists of the English text of the European standard EN 6059-503:2017.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 09.08.2017.	Date of Availability of the European standard is 09.08.2017.
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English Version

**Aerospace series - Electrical cables, installation -
Protection sleeves - Test methods - Part 503: Temperature
rise due to rated current injected on the sleeve**

Série aérospatiale - Câbles électriques, installation -
Gaines de protection - Méthodes d'essais - Partie 503 :
Échauffement sous courant nominal

Luft- und Raumfahrt - Elektrische Leitungen,
Installation - Schutzschläuche - Prüfverfahren - Teil
503: Erwärmung bei Nennstrom des Schutzschlauchs

This European Standard was approved by CEN on 12 June 2017.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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European foreword

This document (EN 6059-503:2017) 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 European Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, 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 February 2018, and conflicting national standards shall be withdrawn at the latest by February 2018.

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

This document supersedes EN 6059-503:2012.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies a method of assessing the behaviour and temperature increase of EMI protection sleeves or conduits when subject to permanent and/or fault currents in the shielding of the conduit or sleeve material and their effect on the cables within the cable sleeve.

It shall be used together with EN 3475-100.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

3 Preparation of specimens

3.1 General

Each specimen having 750 mm to 1 000 mm useful length between the supports, shall be installed horizontally in front of a screen and lightly stretched at the ends to avoid any slack during the test.

The test shall be carried out at ambient temperature T_a (typically 20 °C) in a chamber where the whole unit shall be sheltered from draughts. An extraction shall be provided but only operated after completion of the test.

To identify the appearance of smoke, a screen with black and white horizontal bands or any other device shall be used.

3.2 Preparation of specimens

Specimens will be installed horizontally in a box with a background striped in white and black.

To detect smoke appearance the box will be transparent in the front.

It will be closed to avoid any heat exchange.

An exhaust fan will be added above the box in case of toxic fume generation (it shall not function during the test but only at the end and this to not disrupts the heating).

As described below two (2) circuits are provided: the first one is for the connecting power and the second one is for the measurement.