



BSI Standards Publication

## **Aerospace series – Cables, electric, general purpose, with conductors in aluminium or copper-clad aluminium**

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Part 006: AZA family, single and multicore assembly, for use  
in low pressure atmosphere – Product standard

## National foreword

This British Standard is the UK implementation of EN 4681-006:2019. It supersedes BS EN 4681-006:2015, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ACE/6, Aerospace avionic electrical and fibre optic technology.

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

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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Published by BSI Standards Limited 2019

ISBN 978 0 580 99706 8

ICS 49.060

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 June 2019.

### Amendments/corrigenda issued since publication

Date	Text affected
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EUROPEAN STANDARD

**EN 4681-006**

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2019

ICS 49.060

Supersedes EN 4681-006:2015

English Version

**Aerospace series - Cables, electric, general purpose, with  
conductors in aluminium or copper-clad aluminium - Part  
006: AZA family, single and multicore assembly, for use in  
low pressure atmosphere - Product standard**

Série aérospatiale - Câbles, électriques, d'usage  
général, avec conducteurs en aluminium ou en  
aluminium chemisé cuivre - Partie 006: Famille AZA, fil  
simple et éléments assemblés, pour emploi en basse  
pression - Norme de produit

Luft- und Raumfahrt - Elektrische Leitungen, zur  
allgemeinen Verwendung, mit Leitern aus Aluminium  
oder kupferbeschichtetem Aluminium - Teil 006: AZA-  
Familie, ein- und mehradrige Leitungen, zur  
Anwendung bei niedrigem Luftdruck - Produktnorm

This European Standard was approved by CEN on 6 August 2018.

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

CEN members are the national standards bodies of 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 United Kingdom.



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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

This document (EN 4681-006:2019) 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 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 December 2019, and conflicting national standards shall be withdrawn at the latest by December 2019.

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 4681-006:2015.

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 the characteristics of electrical wires AZA family for use in the on board:

- 115 V (phase to neutral) or 200 V (phase to phase) electrical network of aircraft.
- 230 V (phase to neutral) or 400 V (phase to phase) electrical network of aircraft and particularly use in non-pressurized areas.

This cable family is used at operating temperature between – 65 °C and 180 °C.

## 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 3475-100, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 100: General* <sup>1)</sup>

EN 3719, *Aerospace series — Aluminium or aluminium alloy conductors for electrical cables — Product standard*

EN 3838, *Aerospace series — Requirements and tests on user-applied markings on aircraft electrical cables*

EN 4681-001, *Aerospace series — Cables, electric, general purpose, with conductors in aluminium or copper-clad aluminium — Part 001: Technical specification*

EN 4681-002, *Aerospace series — Cables, electric, general purpose, with conductors in aluminium or copper-clad aluminium — Part 002: General*

EN 9133, *Aerospace series — Quality Management Systems — Qualification Procedure for Aerospace Standard Products*

TR 6058, *Aerospace series — Cable code identification list* <sup>2)</sup>

## 3 Terms, definitions and symbols

For the purposes of this document, the terms, definitions and symbols given in EN 3475-100 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 <http://www.iso.org/obp>

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1) All its parts quoted in this European Standard.

2) Published as ASD-STAN Technical Report at the date of publication of this standard by AeroSpace and Defence industries Association of Europe - Standardization (ASD-STAN), [www.asd-stan.org](http://www.asd-stan.org)