
Aeronavtika - Kabli, električni, za splošne namene, z vodniki iz aluminija ali pobakrenega aluminija - 003. del: Družina AD, enojni, z možnostjo UV-laserskega tiskanja - Standard za proizvod

Aerospace series - Cables, electric, general purpose, with conductors in aluminium or copper-clad aluminium - Part 003: AD family, Single, UV laser printable - Product standard

Luft- und Raumfahrt - Elektrische Leitungen, zur allgemeinen Verwendung, mit Leitern aus Aluminium oder kupferbeschichtetem Aluminium - Teil 003: AD-Familie, einadrig, mit UV-Laser bedruckbar, Produktnorm

Série aérospatiale - Câbles électriques, d'usage général, avec conducteurs en aluminium ou en aluminium chemisé cuivre - Partie 003 : Famille AD, fil simple, marquable au laser UV - Norme de produit

<https://standards.iteh.ai/catalog/standards/sist/67d22c62-a81d-43d3-9ce3-1517ebe62c48/sist-en-4681-003-2025>

Ta slovenski standard je istoveten z: EN 4681-003:2024

ICS:

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

SIST EN 4681-003:2025

en,fr,de

EUROPEAN STANDARD

EN 4681-003

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2024

ICS 49.060

English Version

**Aerospace series - Cables, electric, general purpose, with
conductors in aluminium or copper-clad aluminium - Part
003: AD family, single, UV laser printable - Product
standard**

Série aérospatiale - Câbles électriques, d'usage général,
avec conducteurs en aluminium ou en aluminium
chemisé cuivre - Partie 003 : Famille AD,
monoconducteurs, marquables par laser UV - Norme
de produit

Luft- und Raumfahrt - Elektrische Leitungen, zur
allgemeinen Verwendung, mit Leitern aus Aluminium
oder kupferbeschichtetem Aluminium - Teil 003: AD-
Familie, einadrig, mit UV-Laser bedruckbar,
Produktnorm

This European Standard was approved by CEN on 2 September 2024.

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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
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

EN 4681-003:2024 (E)

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European foreword

This document (EN 4681-003:2024) has been prepared by 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 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.

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.

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EN 4681-003:2024 (E)

1 Scope

This document specifies the characteristics of UV laser printable electrical lightweight wires AD family for use in the on-board 115 V (phase to neutral) or 200 V (phase to phase) AC, 28 VDC electrical systems of aircraft at operating temperatures between -65°C and 180°C . These cables are demonstrated to be arc resistant in sizes AWG 24 to 14 (115 VAC/200 VAC).

In addition, these cables are suitable for use at 230 VAC/400 VAC in pressurized zones only when installed to take account of possible short circuit effects.

Other electrical system configurations are the responsibility of the users.

It is also possible to mark these cables by qualified compatible marking which satisfies the requirements of EN 3838:2022.

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*

EN 3475-201, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 201: Visual examination*

EN 3475-202, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 202: Mass*

EN 3475-203, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 203: Dimensions*

EN 3475-301, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 301: Ohmic resistance per unit length*

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

EN 3475-303, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 303: Insulation resistance*

EN 3475-304, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 304: Surface resistance*

EN 3475-305, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 305: Overload resistance*

EN 3475-306, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 306: Continuity of conductors*

EN 3475-401, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 401: Accelerated ageing*

EN 3475-402, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 402: Shrinkage and delamination*