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BSI Standards Publication

Aerospace series - Cable, electrical, fire resistant - Operating temperatures between -65 °C and 260 °C

Part 005: DW family, single UV laser printable and multicore
assembly - Light weight - Product standard

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National foreword

This British Standard is the UK implementation of EN 2346-005:2017. It supersedes BS EN 2346-005:2013, which is withdrawn.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.

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English Version

Aerospace series - Cable, electrical, fire resistant - Operating temperatures between -65 °C and 260 °C - Part 005: DW family, single UV laser printable and multicore assembly - Light weight - Product standard

Série aérospatiale - Câbles électriques résistant au feu - Températures de fonctionnement comprises entre -65 °C et 260 °C - Partie 005 : Famille DW, fil simple marquable au laser UV et éléments assemblés - Version allégée - Norme de produit

Luft- und Raumfahrt - Feuerbeständige elektrische Leitungen - Betriebstemperaturen zwischen -65 °C und 260 °C - Teil 005: DW-Familie, einadrige, UV-Laser bedruckbar, und mehradrige Leitungen - Gewichtsoptimiert - Produktnorm

This European Standard was approved by CEN on 23 July 2017.

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

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European foreword

This document (EN 2346-005:2017) 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 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of an identical text or by endorsement, at the latest by May 2018, and conflicting national standards shall be withdrawn at the latest by May 2018.

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

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1 Scope

This European Standard specifies the characteristics of light weight fire proof, unscreened, electrical cables for use in the on-board electrical systems of aircraft at operating temperature between - 65 °C and 260 °C.

This cable has not been demonstrated to be arc resistance at a.c.voltages above 200 V rms (network 115/200 V rms).

Single core is UV laser printable in accordance with EN 3838; UV laser markability is not mandatory for multicore cables.

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 2234, *Aerospace series — Cable, electrical, fire resistant — Technical specification*

EN 2346-002, *Aerospace series — Cable, electrical, fire resistant — Operating temperatures between — 65 °C and 260 °C — Part 002: General*

EN 3475 (all parts), *Aerospace series — Cables, electrical, aircraft use — Test methods*

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

EN 4608-001, *Aerospace series — Cable, electrical, fire resistant — Single and twisted multicore assembly, screened (braided) and jacketed — Operating temperatures between — 65 °C and 260 °C — Part 001: Technical specification*

EN 9133, *Aerospace series — Quality management systems — Qualification procedure for aerospace standard parts*

IEC 28:1925, *International standard of resistance for copper*

3 Terms and definitions

For the purposes of this document the terms and definitions given in EN 3475-100 apply.

4 Materials and construction

4.1 Materials

4.1.1 Conductors

Individual strands used for the conductors shall be cylindrical and shall be:

- of nickel clad copper alloy for nominal cross sections of 0,4 mm² (004) and 0,25 mm² (002),
- of nickel clad copper for nominal cross sections $\geq 0,6$ mm² (006).

The copper shall meet the requirements of IEC 28 and the copper alloy the requirements of EN 2234.

4.1.2 Insulation

The insulation shall comply with the requirements of the present standard and [Subclause 4.2](#) of EN 2234.