



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 4608-001:2006

ICS 49.060

**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**

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EUROPEAN STANDARD

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EUROPÄISCHE NORM

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English Version

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

Série aérospatiale - Câbles électriques blindés résistant au feu - Simple et multifilaire blindé (tresse) gainé - Températures de fonctionnement comprises entre - 65 °C et 260 °C - Partie 001 : Spécification technique

Luft- und Raumfahrt - Feuerbeständige elektrische Leitungen - Einzel- und mehradrig verdrehte Leitungen, geschirmt (Geflecht) und ummantelt - Betriebstemperaturen zwischen - 65 °C und 260 °C - Teil 001: Technische Lieferbedingungen

This European Standard was approved by CEN on 20 April 2006.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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Foreword

This European Standard (EN 4608-001:2006) has been prepared by the European Association of Aerospace Manufacturers - Standardization (AECMA-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 AECMA, 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 2006, and conflicting national standards shall be withdrawn at the latest by December 2006.

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.

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

EN 4608-001:2006 (E)

1 Scope

This document specifies the required characteristics and test procedures for fire resistant or fire proof electrical cables for use in aircraft electrical systems. They shall be operated at a rated AC voltage of 600 VAC, a frequency of maximum 2 000 Hz and a long-term temperature of up to 260 °C (ambient temperature plus temperatures rise in conductor).

These cables shall also maintain a specific dielectric strength when they are subjected to a flame of 1 100 °C after five minutes (fire resistant) or 15 minutes (fire proof) exposure.

2 Normative references

The following referenced documents are indispensable for the application 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.

These references are not fully applicable. The present specification defines the field of application of each document.

ISO 2574, *Aircraft — Electrical cables — Identification marking.*

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

EN 2235, *Aerospace series — Single and multicore electrical cables, screened and jacketed — Technical specification.*

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

EN 3838, *Aerospace series — Requirements and tests on user-applied markings on aircraft electrical cables.*¹⁾

EN 4608-002, *Aerospace series — Cable, electrical, fire resistant — Single and twisted multicore assembly, screened (braided) and jacketed — Operating temperatures between –65 °C and 260 °C — Part 002: General.*

EN 4608-005, *Aerospace series — Cable, electrical, fire resistant — Single and twisted multicore assembly, screened (braided) and jacketed — Operating temperatures between –65 °C and 260 °C — Part 005: DW family — lightweight two-core gauge 24 for data transmission — UV laser printable — Product standard.*¹⁾

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

3 Terms and definitions

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

* And all parts quoted in Table 1.

1) Published as AECMA Prestandard at the date of publication of this standard.

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