



**NSAI**  
Standards

Irish Standard  
I.S. EN 4611-003:2012

Aerospace series - Cables, electrical, for general purpose, single and multicore assembly - XLETFE Family - Part 003: Tin plated copper - Operating temperatures, between -65 °C and 135 °C - Single extruded wall for enclosed applications - UV laser printable - Product standard

## I.S. EN 4611-003:2012

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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*This document replaces:*

*This document is based on:*  
EN 4611-003:2012

*Published:*  
24 February, 2012

This document was published under the authority of the NSAI and comes into effect on:  
24 February, 2012

**ICS number:**

49.060

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ICS 49.060

English Version

**Aerospace series - Cables, electrical, for general purpose,  
single and multicore assembly - XLETFE Family - Part 003: Tin  
plated copper - Operating temperatures, between -65 °C and  
135 °C - Single extruded wall for enclosed applications - UV  
laser printable - Product standard**

Série aérospatiale - Câbles, électriques, d'usage général,  
mono et multiconducteurs - Famille XLETFE - Partie 003 :  
Cuivre étamé - Températures de fonctionnement comprises  
entre - 65 °C et 135 °C - Fil simple isolé pour applications  
internes - Marquable au laser UV - Norme de produit

Luft- und Raumfahrt - Ein- und mehradrige elektrische  
Leitungen für allgemeine Verwendung - XLETFE Familie -  
Teil 003: Kupfer verzinkt - Betriebstemperaturen zwischen -  
65 °C und 135 °C - Einfach extrudierte Isolierung für interne  
(geschützte) Verwendung - UV-Laser bedruckbar -  
Produktnorm

This European Standard was approved by CEN on 17 September 2011.

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## **Foreword**

This document (EN 4611-003:2012) 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of an identical text or by endorsement, at the latest by August 2012, and conflicting national standards shall be withdrawn at the latest by August 2012.

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 UV laser printable, tin plated copper conductor electrical cables, Crosslinked Ethylene Tetra Fluoro Ethylene co-polymer (XLETFE) family, for use in the on-board electrical systems of aircraft operating at temperatures between  $-65\text{ }^{\circ}\text{C}$  and  $135\text{ }^{\circ}\text{C}$ , operating at voltages not exceeding 600 V r.m.s and frequencies not exceeding 2 000 Hz. These cables are for enclosed applications e.g. within equipment or conduit; they are only suitable for open airframe use when provided with additional protection against mechanical abuse. In case of conflict between this European Standard and other referenced documents the requirements of this European Standard should take precedence.

## 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 2084, *Aerospace series – Cables, electric, single-core, general purpose, with conductors in copper or copper alloy – Technical specification*

EN 2235, *Aerospace series – Single and multicore electrical cables, screened and jacketed*

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

EN 4611-002, *Aerospace series – Cables, electrical, for general purpose, single and multicore assembly – XLETFE Family – Part 002: General*

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

## 3 Terms, definitions, symbols and abbreviations

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

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<sup>1</sup> All parts quoted in Table 2 and Table 3.

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