



NSAI
Standards

Irish Standard
I.S. EN 4611-003:2018

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 4611-003:2018

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

EN 4611-003:2018

Published:

2018-12-12

This document was published under the authority of the NSAI and comes into effect on:

2019-01-15

ICS number:

49.060

NOTE: If blank see CEN/CENELEC cover page

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

I.S. EN 4611-003:2018 is the adopted Irish version of the European Document EN 4611-003:2018, 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

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This page is intentionally left blank

EUROPEAN STANDARD

EN 4611-003

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2018

ICS 49.060

Supersedes EN 4611-003:2012

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: Kupferverzinnt -
Betriebstemperaturen zwischen -65 °C und 135 °C -
Einfach extrudierte Isolierung für interne Verwendung
- UV-Laser bedruckbar - 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

Contents

	Page
European foreword	3
1 Scope.....	4
2 Normative references.....	4
3 Terms, definitions, symbols and abbreviations.....	4
4 Materials and construction	4
5 Required characteristics	6
6 Quality assurance.....	10
7 Designation	10
8 Identification and marking.....	10
9 Packaging, labelling and delivery lengths.....	11
10 Technical specification	11

European foreword

This document (EN 4611-003:2018) 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 June 2019, and conflicting national standards shall be withdrawn at the latest by June 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 4611-003:2012.

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.

EN 4611-003:2018 (E)

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 $135\text{ }^{\circ}\text{C}$. The voltage rating is 600 Vrms at sea level. This insulation system has been used in aerospace applications using 115 Vac (phase-to-neutral) 400 Hz and 28 Vdc. Verification of the suitability of cables for use in other electrical systems is the responsibility of the user.

These cables are only suitable for airframe use with additional protection against mechanical abuse. In case of conflict between this standard and other referenced documents the requirements of this standard shall 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, electrical, general purpose, with conductors in copper or copper alloy — Technical specification*

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

EN 3475-100 (all parts), *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 Products*

3 Terms, definitions, symbols and abbreviations

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

4 Materials and construction

4.1 Materials

Conductor

The cable conductors shall be made of tin plated copper according to EN 4611-002.

Insulation

Single layer of extruded XLETFE

For single core, it shall be possible to mark the outer insulation by UV laser printing.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-