



NSAI
Standards

Irish Standard
I.S. EN 3646-001:2015

Aerospace series - Connectors, electrical,
circular, bayonet coupling, operating
temperature 175 °C or 200 °C continuous -
Part 001: Technical specification

I.S. EN 3646-001:2015

Incorporating amendments/corrigenda/National Annexes issued since publication:

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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 3646-001:2015 is the adopted Irish version of the European Document EN 3646-001:2015, Aerospace series - Connectors, electrical, circular, bayonet coupling, operating temperature 175 °C or 200 °C continuous - Part 001: Technical specification

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EUROPEAN STANDARD

EN 3646-001

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2015

ICS 49.060

Supersedes EN 3646-001:2007

English Version

**Aerospace series - Connectors, electrical, circular, bayonet
coupling, operating temperature 175 °C or 200 °C
continuous - Part 001: Technical specification**

Série aérospatiale - Connecteurs électriques circulaires
à accouplement par baïonnettes, température d'
utilisation 175 °C ou 200 °C continu - Partie 001:
Spécification technique

Luft- und Raumfahrt - Elektrische Rundsteckverbinder
mit Bajonettkupplung, Betriebstemperatur 175 °C oder
200 °C konstant - Teil 001: Technische
Lieferbedingungen

This European Standard was approved by CEN on 8 June 2015.

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, 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: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 3646-001:2015) 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 2016, and conflicting national standards shall be withdrawn at the latest by May 2016.

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.

This document supersedes EN 3646-001:2007.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 3646-001:2015 (E)

Introduction

This family of connectors is derived from MIL-DTL-26482, series 2, the NAS 1599 bayonet connector with which it is intermateable and which uses AS-39029 for the contacts. It is particularly suitable for use on aircraft applying EN 2282.

These connectors are distinguishable from MIL-DTL-26482 and NAS 1599 by:

- being of a lower mass;
- having reduced dimensions;
- accepting smaller cables.

1 Scope

This standard specifies the general characteristics, the conditions for qualification, acceptance and quality assurance, as well as the test programmes and groups for bayonet coupling circular connectors, intended for use in an operating temperature range of -65 °C to 175 °C or 200 °C continuous according to the class and models.

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 2266-002, *Aerospace series — Cables, electrical, for general purpose — Operating temperatures between -55 °C and 200 °C — Part 002: General*

EN 2282, *Aerospace series — Characteristics of aircraft electrical supplies*

EN 2591-100*, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 100: General*

EN 3155-001, *Aerospace series — Electrical contacts used in elements of connection — Part 001: Technical specification*

EN 3197, *Aerospace series — Installation of aircraft electrical and optical interconnection systems*

EN 3646-002, *Aerospace series — Connectors, electrical, circular, bayonet coupling, operating temperature 175 °C or 200 °C continuous — Part 002: Specification of performance and contact arrangements*

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

ISO 263, *Inch screw threads — General plan and selection for screws, bolts and nuts — Diameter range 0,06 to 6 in*

ISO 4524-1, *Metallic coatings — Test methods for electrodeposited gold and gold alloy coatings — Part 1: Determination of coating thickness*

AS 39029, *Contacts, electrical connector, general specification for¹⁾*

MIL-DTL-26482H, *Connector, electrical, (circular, Miniature, quick disconnect, environment resisting), receptacles and plugs, general specification for²⁾*

MIL-HDBK-454N, *General guidelines for electronic equipment²⁾*

NAS 1599, *(Inactive) Connectors, general purpose, electrical, miniature circular, environment resisting, 200 °C maximum temperature³⁾*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 2591-100 apply.

* And all parts quoted in this standard.

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2) Published by: Department of Defense (DOD), the Pentagon, Washington, DC 20301, USA (<http://www.defenselink.mil/>).

3) Published by: Aerospace Industries Association of America, Inc. (AIA), 1250 Eye Street, NW; Suite 1100, Washington, DC 20005, USA (<http://www.aia-aerospace.org>).

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