



NSAI
Standards

Irish Standard
I.S. EN 2283:2010

Aerospace series - Testing of aircraft wiring

I.S. EN 2283:2010

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:
EN 2283:1996

This document is based on:
EN 2283:2010

Published:
21 December, 2010

This document was published under the authority of the NSAI and comes into effect on: 21 December, 2010

ICS number:
49.060

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

English Version

Aerospace series - Testing of aircraft wiring

Série aérospatiale - Vérification des câblages d'aéronefs

Luft- und Raumfahrt - Prüfung der Verkabelung von
Luftfahrzeugen

This European Standard was approved by CEN on 4 March 2010.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents		Page
Foreword.....		3
Introduction		4
1 Scope		4
2 Normative references		4
3 Terms and definitions		5
4 Tests.....		5
4.1 General.....		5
4.2 Continuity		5
4.3 Dielectric strength		5
4.4 Insulation resistance		6
4.5 Test preparation.....		6
5 Procedures		6
5.1 General.....		6
5.2 Testing of wiring in production		8
5.2.1 Continuity		8
5.2.2 Dielectric strength		8
5.3 Testing of assembled and installed bundles		8
6 Requirements		8
7 Test report		8

Foreword

This document (EN 2283:2010) 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 2011, and conflicting national standards shall be withdrawn at the latest by June 2011.

This document supersedes EN 2283:1996.

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, Bulgaria, Croatia, 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.

Introduction

Due to the diversity of aircraft, manufacturing and installing methods for wiring, the tests defined in Clause 1 are carried out at different stages in the manufacturing programme:

- after assembly of cables into bundles before installation in the aircraft;
- after installation of bundles into the aircraft;
- after repairs or modifications.

1 Scope

This European Standard specifies:

- the tests for finished wiring, including connectors and, if necessary, terminals, terminal ends, junction boxes, circuit breakers, etc.;
- these tests do not concern equipment installed in the aircraft (see operation of systems and do not apply to the wiring used instrumentation);
- the requirements for verification of aircraft electrical wiring;
 - continuity of circuits;
 - dielectric strength;
 - insulation resistance.

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.

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

EN 61557-2, *Electrical safety in low voltage distribution systems up to 1000 V a.c. and 1500 V d.c. – Equipment for testing, measuring or monitoring of protective measures – Part 2: Insulation resistance (IEC 61557-2:2007)*

EN 61557-4, *Electrical safety in low voltage distribution systems up to 1000 V a.c. and 1500 V d.c. – Equipment for testing, measuring or monitoring of protective measures – Part 4: Resistance of earth connection and equipotential bonding (IEC 61557-4:2007)*

ISO 2678, *Environmental tests for aircraft equipment – Insulation resistance and high voltage tests for electrical equipment*

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](#)
-