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		31 1753

Aerospace series - Connectors, electrical, rectangular, modular - Operating temperature 175 °C continuous - Part 001: Technical specification

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

**Aerospace series - Connectors, electrical, rectangular,
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001: Technical specification**

Luft- und Raumfahrt - Elektrischer
Rechtecksteckverbinder in modularer Bauweise -
Betriebstemperatur 175 °C - Teil 001: Technische
Lieferbedingungen

Série aéronautique - Connecteurs électriques
rectangulaires modulaires - Température d'utilisation
175 °C continu - Partie 001: Spécification technique

This European Standard was approved by CEN on 5 March 2015.

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European foreword

This document (EN 4165-001:2015) 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 European 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of an identical text or by endorsement, at the latest by April 2016, and conflicting national standards shall be withdrawn at the latest by April 2016.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 4165-001:2007.

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.

1 Scope

This European standard specifies the general characteristics, the conditions for qualification, acceptance and quality assurance, as well as the test programs and groups for rectangular connectors with one or multiple removable modules, intended for use in a temperature range from –55 °C to 175 °C continuous.

This family of connectors is particularly suitable for aeronautic use in zones of severe environmental conditions on board aircraft, applying EN 2282.

The maximum in-service temperature can be limited by maximum temperature of contacts.

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

EN 2591-100¹⁾, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 001: General*

EN 3155-002, *Aerospace series — Electrical contacts used in elements of connection — Part 002: List and utilization of contacts*

EN 3155-008, *Aerospace series — Electrical contacts used in elements of connection — Part 008: Contacts, electrical, male, type A, crimp, class S — Product standard*

EN 3155-070, *Aerospace series — Electrical contacts used in elements of connection — Part 070: Contacts, electrical, male, type A, crimp, class S — Product standard*

EN 3155-071, *Aerospace series — Electrical contacts used in elements of connection — Part 071: Contacts, electrical, female, type A, crimp, class S — Product standard*

EN 3155-082, *Aerospace series — Electrical contacts used in elements of connection — Part 082: Contacts, electrical, female, type A, crimp, class S — Product standard*²⁾

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

EN 3909, *Aerospace series — Test fluids and test methods for electric components and sub-assemblies*

EN 4165-002, *Aerospace series — Connectors, electrical, rectangular, modular — Operating temperature 175 °C continuous — Part 002: Specification of performance and contact arrangements*

EN 4165-003, *Aerospace series — Connectors, electrical, rectangular, modular — Operating temperature 175 °C continuous — Part 003: Modules series 2 and series 3 — Product standard*

EN 4165-020, *Aerospace series — Connectors, electrical, rectangular, modular — Operating temperature 175 °C continuous — Part 020: Coupling system keyway for receptacle — Product standard*

¹⁾ And all parts quoted in this European Standard.

²⁾ Published as ASD-STAN Prestandard at the date of publication of this European Standard (<http://www.asd-stan.org/>).

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EN 4165-021, *Aerospace series — Connectors, electrical, rectangular, modular — Operating temperature 175 °C continuous — Part 021: Coupling system keyway for plug — Product standard*

EN 4165-024, *Aerospace series — Connectors, electrical, rectangular, modular — Operating temperature 175 °C continuous — Part 024: Single module plug — Product standard*

EN 4165-025, *Aerospace series - Connectors, electrical, rectangular, modular - Operating temperature 175 °C continuous - Part 025: Module receptacle - Product Standard*

EN 4701 (all parts), *Aerospace series — Connectors, optical, rectangular, modular, operating temperature 12 °C, for EN 4531 contacts*

EN 4830 (all parts), *Aerospace series — Connectors, optical, rectangular, modular, operating temperature 125 °C, for EN 4639-10X contacts ¹⁾*

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

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

IEC 61726, *Cable assemblies, cables, connectors and passive microwave components — Screening attenuation measurement by the reverberation chamber method*

MIL-HDBK-454A, *General Guidelines for Electronic Equipment ³⁾*

TR 4257, *Aerospace series — Elements of electrical and optical connection — Relationship between the numbering systems for parts of EN 2591 ⁴⁾*

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³⁾ Published by: DoD National (US) Mil. Department of Defense (<http://www.defenselink.mil/>).

⁴⁾ Published as ASD-STAN Technical Report at the date of publication of this European Standard (<http://www.asd-stan.org/>).