ICS 49.060 SLOVENSKÁ TECHNICKÁ NORMA Apríl 2025

STN	**Letectvo a kozmonautika Jednopólové ističe, tepelne kompenzované, menovitý prúd od 20 A do 50 A Časť 001: Technická špecifikácia**	**STN EN 3661-001** 31 1746

Aerospace series - Circuit breakers, single-pole, temperature compensated, rated currents 20 A to 50 A - Part 001: Technical specification

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/25

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EUROPEAN STANDARD
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EN 3661-001

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Supersedes EN 3661-001:2006

English Version

Aerospace series - Circuit breakers, single-pole, temperature compensated, rated currents 20 A to 50 A - Part 001: Technical specification

Série aérospatiale - Disjoncteurs unipolaires compensés en température, intensités nominales 20 A à 50 A - Partie 001 : Spécification technique

Luft- und Raumfahrt - Schutzschalter, einpolig, temperaturkompensiert, Nennströme von 20 A bis 50 A - Teil 001: Technische Lieferbedingungen

This European Standard was approved by CEN on 6 October 2024.

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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.

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European foreword

This document (EN 3661-001:2024) has been prepared by ASD-STAN.

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, prior to its presentation to CEN.

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.

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 3661-001:2006.

The main changes with respect to the previous edition are as follows:

— EN 3661-001 (P4), 08/2006:

  o g_n replaced by g-PK for sinusoidal and low frequencies;

  o g_n replaced by Grms for random.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this document: 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

1 Scope

This document specifies the single-pole temperature compensated circuit breakers with signal contacts, polarized or not, rated from 20 A to 50 A and used in aircraft on-board circuits. It describes specific environmental, electrical and mechanical characteristics and the stringency of tests to be applied according to test methods of EN 3841-100.

These circuit breakers are intended for use in aircraft with electrical supplies in accordance with EN 2282.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 2083, *Aerospace series — Copper or copper alloy conductors for electrical cables — Product standard*

EN 2825, *Aerospace series — Burning behaviour of non-metallic materials under the influence of radiating heat and flames — Determination of smoke density*

EN 2826, *Aerospace series — Burning behaviour of non-metallic materials under the influence of radiating heat and flames —Determination of gas components in the smoke*

EN 3841-100,[1] *Aerospace series — Circuit breakers — Test methods — Part 100: General*

EN 3841-201, *Aerospace series — Circuit breakers — Test methods — Part 201: Visual inspection*

EN 3841-202, *Aerospace series — Circuit breakers — Test methods — Part 202: Dimensions and masses*

EN 3841-301:2004, *Aerospace series — Circuit breakers — Test methods — Part 301: Voltage drop*

EN 3841-302, *Aerospace series — Circuit breakers — Test methods — Part 302: Insulation resistance*

EN 3841-303, *Aerospace series — Circuit breakers — Test methods — Part 303: Dielectric strength*

EN 3841-304, *Aerospace series — Circuit breakers — Test methods — Part 304: Tripping points*

EN 3841-305, *Aerospace series — Circuit breakers — Test methods — Part 305: Short-circuit performance*

EN 3841-306, *Aerospace series — Circuit breakers — Test methods — Part 306: Service life*

EN 3841-307, *Aerospace series — Circuit breakers — Test methods — Part 307: Performance with a locked tripping system*

EN 3841-308, *Aerospace series — Circuit breakers — Test methods — Part 308: Lightning*

EN 3841-401, *Aerospace series — Circuit breakers — Test methods — Part 401: Sand and dust*

EN 3841-402, *Aerospace series — Circuit breakers — Test methods — Part 402: Corrosion*

EN 3841-403, *Aerospace series — Circuit breakers — Test methods — Part 403: Humidity*

[1] Published as ASD-STAN prEN at the date of publication of this document, available at: https://www.asd-stan.org/.

EN 3841-404, *Aerospace series — Circuit breakers — Test methods — Part 404: Explosion proofness*

EN 3841-405, *Aerospace series — Circuit breakers — Test methods — Part 405: Fluid resistance*

EN 3841-406, *Aerospace series — Circuit breakers — Test methods — Part 406: Flammability*

EN 3841-501, *Aerospace series — Circuit breakers — Test methods — Part 501: Actuator button travel*

EN 3841-502, *Aerospace series — Circuit breakers — Test methods — Part 502: Operating forces*

EN 3841-503, *Aerospace series — Circuit breakers — Test methods — Part 503: Strength of actuating components*

EN 3841-504, *Aerospace series — Circuit breakers — Test methods — Part 504: Strength of mounting elements*

EN 3841-505, *Aerospace series — Circuit breakers — Test methods — Part 505: Strength of main terminals*

EN 3841-506, *Aerospace series — Circuit breakers — Test methods — Part 506: Vibration performance*

EN 3841-507, *Aerospace series — Circuit breakers — Test methods — Part 507: Mechanical shocks*

EN 3841-508, *Aerospace series — Circuit breakers — Test methods — Part 508: Centrifugal acceleration*

EN 3841-509, *Aerospace series — Circuit breakers — Test methods — Part 509: Insertion and extraction forces of signal contact terminals*

EN 3841-510, *Aerospace series — Circuit breakers — Test methods — Part 510: Strength of signal contact terminals*

EN 3841-511, *Aerospace series — Circuit breakers — Test methods — Part 511: Combined test: temperature, altitude and vibration*

EN 3844-1, *Aerospace series — Flammability of non-metallic materials — Part 1: Small burner test, vertical — Determination of the vertical flame propagation*

MIL-I-81969/1A,[2] *Installing and removal tools, connector electrical contact, type III, class 2, composition C*

MIL-I-81969/14C,[2] *Installing and removal tools, connector electrical contact, type III, class 2, composition B*

[2] Published by Department of Defense (DOD), available at: https://assist.dla.mil/online/start/.