ICS 49.060 SLOVENSKÁ TECHNICKÁ NORMA Máj 2019

STN	**Letectvo a kozmonautika Trojpólové ističe na poruchový oblúk, tepelne kompenzované, menovitý prúd od 3 A do 25 A, striedavé napätie 115 V, konštantná frekvencia 400 Hz Časť 001: Technická špecifikácia**	**STN EN 4839-001** 31 1749

Aerospace series - Arc fault circuit breakers, three-poles, temperature compensated, rated current 3 A to 25 A - 115 V a.c. 400 Hz constant frequency - 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. 04/19

Obsahuje: EN 4839-001:2018

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 4839-001

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English Version

Aerospace series - Arc fault circuit breakers, three-poles, temperature compensated, rated current 3 A to 25 A - 115 V a.c. 400 Hz constant frequency - Part 001: Technical specification

Série aérospatiale - Disjoncteurs tripolaires à détection d'arc compensés en température, intensités nominales 3 A à 25 A - 115 V c.a. 400 Hz fréquence fixe - Partie 001 : Spécification technique

Luft- und Raumfahrt - Schutzschalter, lichtbogen(überschlags)sensitiv, dreipolig, Temperaturkompensiert, Nennströme von 3 A bis 25 A - 115 V a.c. 400 Hz Konstantfrequenz - Teil 001: Technische Lieferbedingungen

This European Standard was approved by CEN on 8 February 2018.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN 4839-001:2018 E

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European foreword

This document (EN 4839-001:2018) 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of an identical text or by endorsement, at the latest by April 2019, and conflicting national standards shall be withdrawn at the latest by April 2019.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.

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 United Kingdom.

1 Scope

This European Standard specifies the three-poles temperature compensated arc fault circuit breakers without signal contacts, rated from 3 A to 25 A and used in aircraft on-board circuits. In any operating state a "trip-free" tripping is ensured. These Items are designed to protect aircraft wiring system from circuit overload and arc faults. It describes specific environmental, electrical and mechanical characteristics and the stringency of tests to be applied according to test methods of EN 3841-100.

If the design of the arc fault circuit breakers contains software or complex hardware, as a minimum, the software and hardware shall be developed in accordance with RTCA DO-178B or C, DAL C and RTCA DO-254, DAL C, respectively.

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

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 *(all parts)*, *Aerospace series — Circuit breakers — Test Methods — Part 100: General*

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

EN 9133, *Quality Management Systems — Qualification Procedure for Aerospace Standard Products*

EUROCAE ED-14G / RTCA DO 160G *, *Environmental Conditions and Test Procedures for Airborne Equipment* 1)

EUROCAE ED-12B or C / RTCA DO-178B or C, *Software Consideration in Airborne Systems and Equipment Certification* 1)

EUROCAE ED-80 / RTCA DO-254, *Design assurance guidance for airborne electronic hardware* 1)

AS 5692, *Aerospace Standard Arc Fault Circuit Breaker (AFCB) Aircraft, trip-free, single phase and three phase 115 V a.c.-400 Hz — Constant frequency* 2)

* All parts quoted in this standard.

1) Published by: EUROCAE Regional (EU) European Organization for Civil Aviation Equipment http://www.eurocae.org/

2) Published by: SAE National (US) Society of Automotive Engineers http://www.sae.org/