

# SLOVENSKI STANDARD SIST EN 3773-004:2015

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Nadomešča:

SIST EN 3773-004:2002

Aeronavtika - Odklopniki, enopolni, temperaturno kompenzirani, naznačeni tok od 1 A do 25 A - 004. del: UNC-navojni priključki - Standard za proizvod

Aerospace series - Circuit breakers, single-pole, temperature compensated, rated currents 1 A to 25 A - Part 004: UNC thread terminals - Product standard

Luft- und Raumfahrt - Schutzschalter, einpolig, temperaturkompensiert, Nennströme von 1 A bis 25 A - Teil 004: UNC-Klemmengewinde - Produktnorm

Série aérospatiale - Disjoncteurs unipolaires compensés en température, intensités nominales 1 A à 25 April Partie 004 à Bornes à file tagé 3 UNC « Norme de produit b0091aa941f5/sist-en-3773-004-2015

Ta slovenski standard je istoveten z: EN 3773-004:2014

ICS:

49.060 Letalska in vesoljska Aerospace electric

električna oprema in sistemi equipment and systems

SIST EN 3773-004:2015 en,fr,de

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EUROPEAN STANDARD NORME EUROPÉENNE EN 3773-004

EUROPÄISCHE NORM

October 2014

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Supersedes EN 3773-004:1999

#### **English Version**

Aerospace series - Circuit breakers, single-pole, temperature compensated, rated currents 1 A to 25 A - Part 004: UNC thread terminals - Product standard

Série aérospatiale - Disjoncteurs unipolaires compensés en température, intensités nominales 1 A à 25 A - Partie 004 : Bornes à filetage UNC - Norme de produit

Luft- und Raumfahrt - Schutzschalter, einpolig, temperaturkompensiert, Nennströme von 1 A bis 25 A - Teil 004: UNC-Klemmengewinde - Produktnorm

This European Standard was approved by CEN on 12 October 2013.

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.

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

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Foreword		Page
		1
2	Normative references	4
3	Terms and definitions	4
4	Dimensions and mass	4
5	Characteristics	
6	Designation	
7	Rated current code	
8	Delivery hardware codes	
9	Marking	12
10	Technical specification	12

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#### **Foreword**

This document (EN 3773-004:2014) 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 2015, and conflicting national standards shall be withdrawn at the latest by April 2015.

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 3773-004:1999.

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.

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## 1 Scope

This European Standard specifies the characteristics of single-pole circuit breakers, temperature compensated with a rated current from 1 A to 25 A, used in aircraft on-board circuits at a temperature between  $-55\,^{\circ}\text{C}$  and 125  $^{\circ}\text{C}$  and at an altitude of 22 000 m max.

These circuit breakers are operated by a push-pull type single push button (actuator), with delayed action "trip-free" tripping.

They will continue to function up to the short-circuit current.

#### 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 2350, Aerospace series — Circuit breakers — Technical specification

EN 2282, Aerospace series — Characteristics of aircraft electrical supplies

EN 3773-001, Aerospace series — Circuit breakers, single-pole, temperature compensated, rated currents 1 A to 25 A — Part 001: Technical specification NDARD PREVIEW

EN 6113, Aerospace series — Circuit breaker, connecting and attachment hardware 1)

TR 6083, Aerospace series — Cut-outs for installation of electrical components <sup>2)</sup>

FED-STD-595B, Colors used in Government Procurement 30 131b92b-ace8-4507-bbfc-b0091aa941b/sist-en-3773-004-2015

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 2350 apply.

#### 4 Dimensions and mass

#### 4.1 Dimensional characteristics

The circuit breakers do not have to correspond to the pictorial illustration, only the dimensions given shall be adhered to.

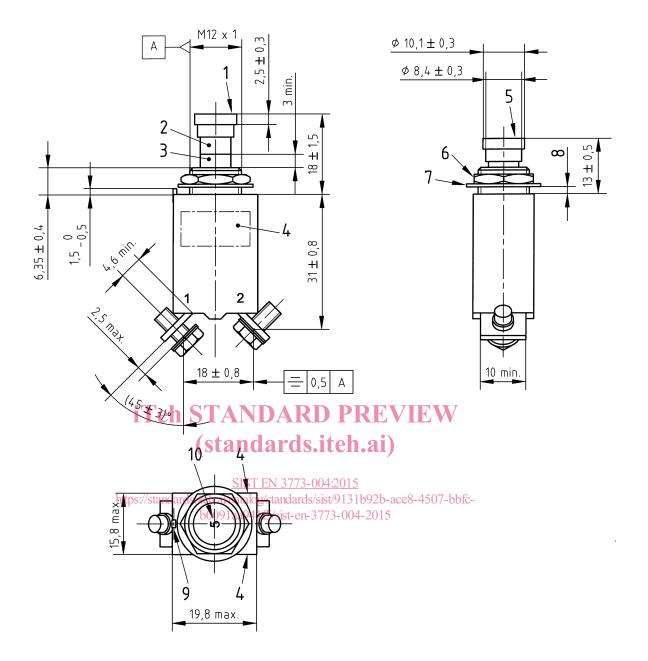
See Figure 1.

Dimensions are in millimetres with exception terminal thread 8-32 UNC.

<sup>1)</sup> Published as ASD-STAN Prestandard at the date of publication of this standard. http://www.asd-stan.org/

<sup>2)</sup> Published as ASD-STAN Technical Report at the date of publication of this standard. http://www.asd-stan.org/

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



## Key

- 1 Push button released
- 2 Black colour according to FED-STD-595B
- 3 White
- 4 Marking, see Clause 6.
- 5 Push button pressed
- 6 Attachment nut

- 7 Lock washer
- 8 1,0 max. to 3,0 max.
- 9 Positioning lug in accordance with the panel cut-out, as per TR 6083C202
- 10 Rated current marking (white on black)

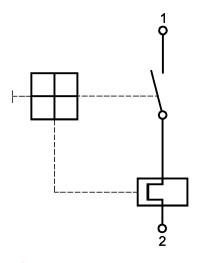
Figure 1 — Circuit breaker

# 4.2 Electrical diagram

See Figure 2.

Push button released: CB open.

Push button pressed: CB closed.



# Key

- 1 Supply
- 2 Load

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Load and supply can be inverted.//standards.iteh.ai/catalog/standards/sist/9131b92b-ace8-4507-bbfc-b0091aa941f5/sist-en-3773-004-2015

Figure 2 — Electrical diagram

#### 4.3 Mass

26 g max. (delivery hardware code A).

# 4.4 Panel mounting

See EN 3773-001.

#### 5 Characteristics

## 5.1 Material, surface treatment

See EN 3773-001.

#### 5.2 Mechanical characteristics

#### 5.2.1 Fasteners

See EN 6113.

#### 5.2.2 Recommended tightening torque of attaching nut for installation

 $(4,00 \pm 0,25) \text{ N.m}$ 

#### 5.2.3 Recommended tightening torque of connection hardware for installation

 $(1,6 \pm 0,1) \text{ N.m}$ 

#### 5.2.4 Resistance to vibrations

#### 5.2.4.1 Combined test: ambient temperature at 70 °C and vibrations

Sinusoidal : 10  $g_n$ , see EN 3773-001.

Random : 5,8  $g_{n}$ , see EN 3773-001.

Low frequencies : 10  $g_n$ , see EN 3773-001.

## 5.2.4.2 Combined test: ambient temperature at 85 °C, altitude and vibrations

Sinusoidal :  $3 g_n$ , see EN 3773-001.

#### 5.2.5 Resistance to shocks

50 g<sub>n</sub>, see EN 3773-001. Teh STANDARD PREVIEW

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#### 5.2.6 Mechanical endurance

See Table 6. SIST EN 3773-004.2015

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#### 5.3 Environment characteristics

#### 5.3.1 Humidity

See EN 3773-001.

#### 5.3.2 Corrosion

See EN 3773-001.

# 5.3.3 Contaminating liquids

See EN 3773-001.

# 5.3.4 Overvoltage caused by lightning

See EN 3773-001.