SLOVENSKI STANDARD
SIST EN 3774-004:2014

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Nadomešča:
SIST EN 3774-004:2002

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

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

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

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

Ta slovenski standard je istoveten z: **EN 3774-004:2014**

ICS:

49.060	Letalska in vesoljska električna oprema in sistemi	Aerospace electric equipment and systems

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EUROPEAN STANDARD

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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.

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Contents

Page

Foreword 3

1 Scope 4

2 Normative references 4

3 Terms and definitions 4

4 Dimensions and mass 5
4.1 Dimensional characteristics 5
4.2 Electrical diagram 6
4.3 Mass 6
4.4 Panel mounting 6

5 Characteristics 6
5.1 Material, surface treatment 6
5.2 Mechanical characteristics 7
5.2.1 Fasteners 7
5.2.2 Recommended tightening torque of attaching nut for installation 7
5.2.3 Recommended tightening torque of connection hardware for installation 7
5.2.4 Resistance to vibrations 7
5.2.5 Resistance to shocks 7
5.2.6 Mechanical endurance 7
5.3 Environment characteristics 7
5.3.1 Humidity 7
5.3.2 Corrosion 7
5.3.3 Contaminating liquids 7
5.3.4 Overvoltage caused by lightning 7
5.4 Electrical characteristics 8
5.4.1 Nominal voltage of operational circuits 8
5.4.2 Voltage drop at I_n and low current 8
5.4.3 Minimum and maximum tripping thresholds 8
5.4.4 Overload trip 9
5.4.5 Short-circuit values 9
5.4.6 No-load and load endurance 10
5.4.7 Dielectric rigidity 10
5.4.8 Insulation resistance 10

6 Designation 11

7 Rated current code 11

8 Delivery codes 11

9 Marking 12

10 Technical specification 12

Foreword

This document (EN 3774-004:2014) 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 January 2015, and conflicting national standards shall be withdrawn at the latest by January 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 3774-004:1999.

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.

1 Scope

This European Standard specifies the characteristics of three-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 °C and 125 °C for ratings ≤ 15 A and − 55 °C to 90 °C for ratings > 15 A and at an altitude of 22 000 m max.

These circuit breakers are operated by a push-pull type single pushbutton (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 2996-001, *Aerospace series - Circuit breakers, three-pole, temperature compensated, rated current 1 A to 25 A - Part 001: Technical specification*

EN 3774-001, *Aerospace series - Circuit breakers, three-pole, temperature compensated, rated currents 2 A to 25 A, switching capacity 25 /n - Part 001: Technical specification*

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

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

TR 6083, *Aerospace series — Cut-outs for installation of electrical components* [2)]

FED-STD-595B, *Colors used in Government Procurement* [3)]

3 Terms and definitions

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

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

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

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

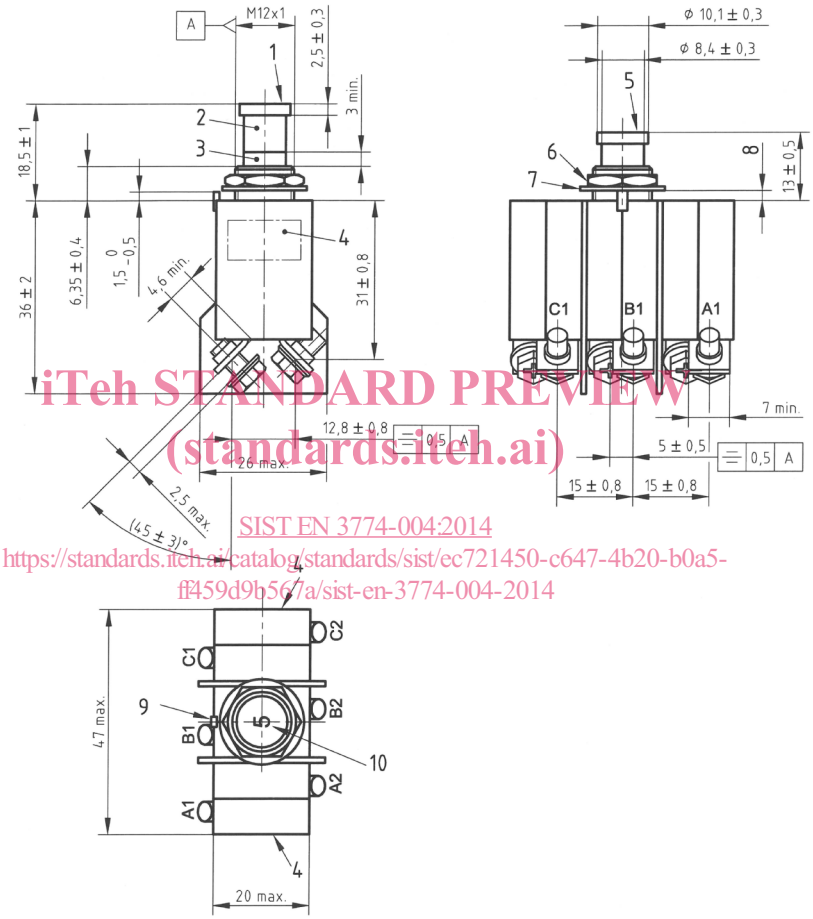
4 Dimensions and mass

4.1 Dimensional characteristics

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

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

See Figure 1.



Key

1	Push button released	6	Attachment nut
2	Black colour according to FED-STD-595B	7	Lock washer
3	White	8	1,0 max. to 3,0 max
4	Marking, see Clause 6	9	Positioning lug in accordance with the panel cut-out, as per TR 6083C202
5	Push button pressed	10	Rated current marking (white on black)

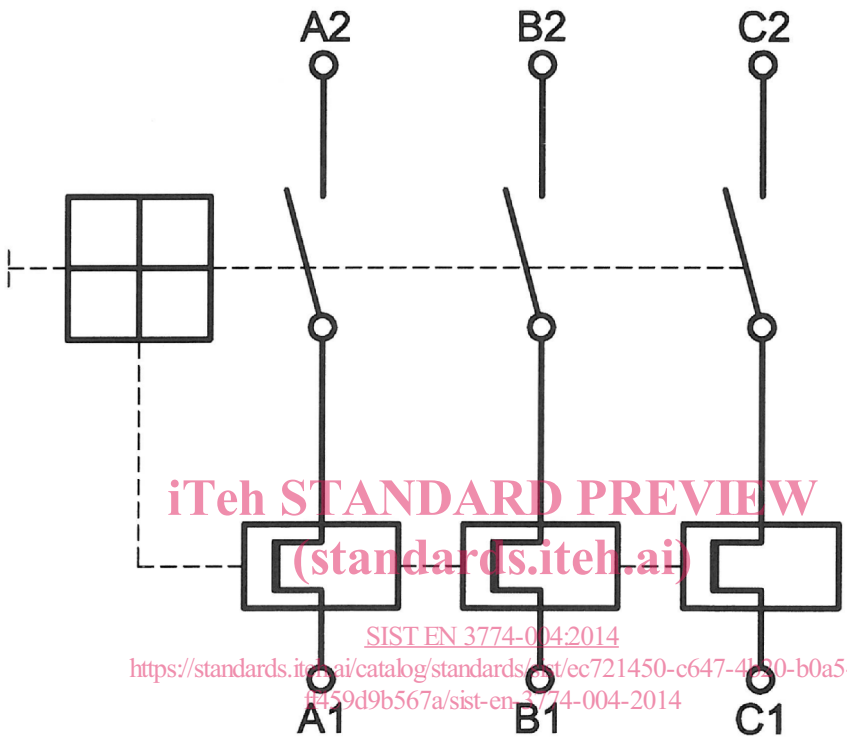
Figure 1 — Configuration – Dimensions – Tolerances

4.2 Electrical diagram

See Figure 2.

Push button released: CB open.

Push button pressed: CB closed.



Key

1 Supply

2 Load

Load and supply can be inverted.

Figure 2 — Electrical diagram

4.3 Mass

63 g max. (delivery code A including hardware).

4.4 Panel mounting

See EN 3774-001.

5 Characteristics

5.1 Material, surface treatment

See EN 2996-001.

5.2 Mechanical characteristics

5.2.1 Fasteners

See EN 6113.

5.2.2 Recommended tightening torque of attaching nut for installation

(4,75 ± 0,25) N.m

5.2.3 Recommended tightening torque of connection hardware for installation

(1,6 ± 0,1) 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 3774-001.

Random : 5,8 g_n, see EN 3774-001.

Low frequencies : 10 g_n, see EN 3774-001.

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

Sinusoidal : 3 g_n, see EN 3774-001.

5.2.5 Resistance to shocks

50 g_n, see EN 3774-001.

5.2.6 Mechanical endurance

See Table 6.

5.3 Environment characteristics

5.3.1 Humidity

See EN 3774-001.

5.3.2 Corrosion

See EN 3774-001.

5.3.3 Contaminating liquids

See EN 3774-001.

5.3.4 Overvoltage caused by lightning

See EN 3774-001.