SLOVENSKI STANDARD
SIST EN 3774-003:2002

01-januar-2002

Aerospace series - Circuit breakers, three-pole, temperature compensated, rated currents 2 A to 25 A, switching capacity 65 /n - Part 003: Metric thread terminals - Product standard

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Luft- und Raumfahrt - Schutzschalter, dreipolig, temperaturkompensiert, Nennströme von 2 A bis 25 A, Schaltvermögen 65 /n - Teil 003: Metrisches Klemmengewinde - Produktnorm

Série aérospatiale - Disjoncteurs tripolaires compensés en température, intensités nominales 2 A a 25 A, pouvoir de coupure 65 /n - Partie 003: Bornes a filetage métrique - Norme de produit

Ta slovenski standard je istoveten z: **EN 3774-003:1999**

ICS:

49.060	Letalska in vesoljska elektriļ na oprema in sistemi	Aerospace electric equipment and systems

SIST EN 3774-003:2002 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 3774-003

June 1999

ICS 49.060

English version

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This European Standard was approved by CEN on 4 September 1998.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Ref. No. EN 3774-3:1999 E

Foreword

This European Standard has been prepared by the European Association of Aerospace Manufacturers (AECMA).

After inquiries 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 AECMA, 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 December 1999, and conflicting national standards shall be withdrawn at the latest by December 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard specifies the required characteristics for three-pole, temperature compensated circuit breakers, rated currents from 2 A to 25 A, switching capacity 65 I_n, metric threads terminals, for use in aircraft electrical systems. Their operating temperatures are between – 55 °C and 125 °C for rated currents equal or lower than 15 A and between – 55 °C and 90 °C for rated currents higher than 15 A, at a maximum altitude of Z = 22 000 m.

It shall be used together with EN 3774-001.

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

2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

ISO 965-2	ISO general purpose metric screw threads - Tolerances - Part 2: Limits of sizes for general purpose bolt and nut threads - Medium quality
ISO 1190-1	Copper and copper alloys - Code of designation - Part 1: Designation of materials
ISO 7045	Cross-recessed pan head screws - Product grade A
EN 2282	Aerospace series - Characteristics of aircraft electrical supplies
EN 2350	Aerospace series - Circuit breakers - Technical specification
EN 3774-001	Aerospace series - Circuit breakers, three-pole, temperature compensated, rated currents 2 A to 25 A, switching capacity 65 I_n - Part 001: Technical specification

3 Definitions

For the purposes of this standard the definitions given in EN 2350 apply.

4 Required characteristics

4.1 Short-circuit performance

Test current: 65 I_n prospective, 0,8 ≤ cos φ < 1
Number of CO/OCO tests: 1 CO + 2 OCO

4.2 Dimensions, mounting, electrical connections

See figures 1, 2 and 3.

Dimensions and tolerances are in millimetres.

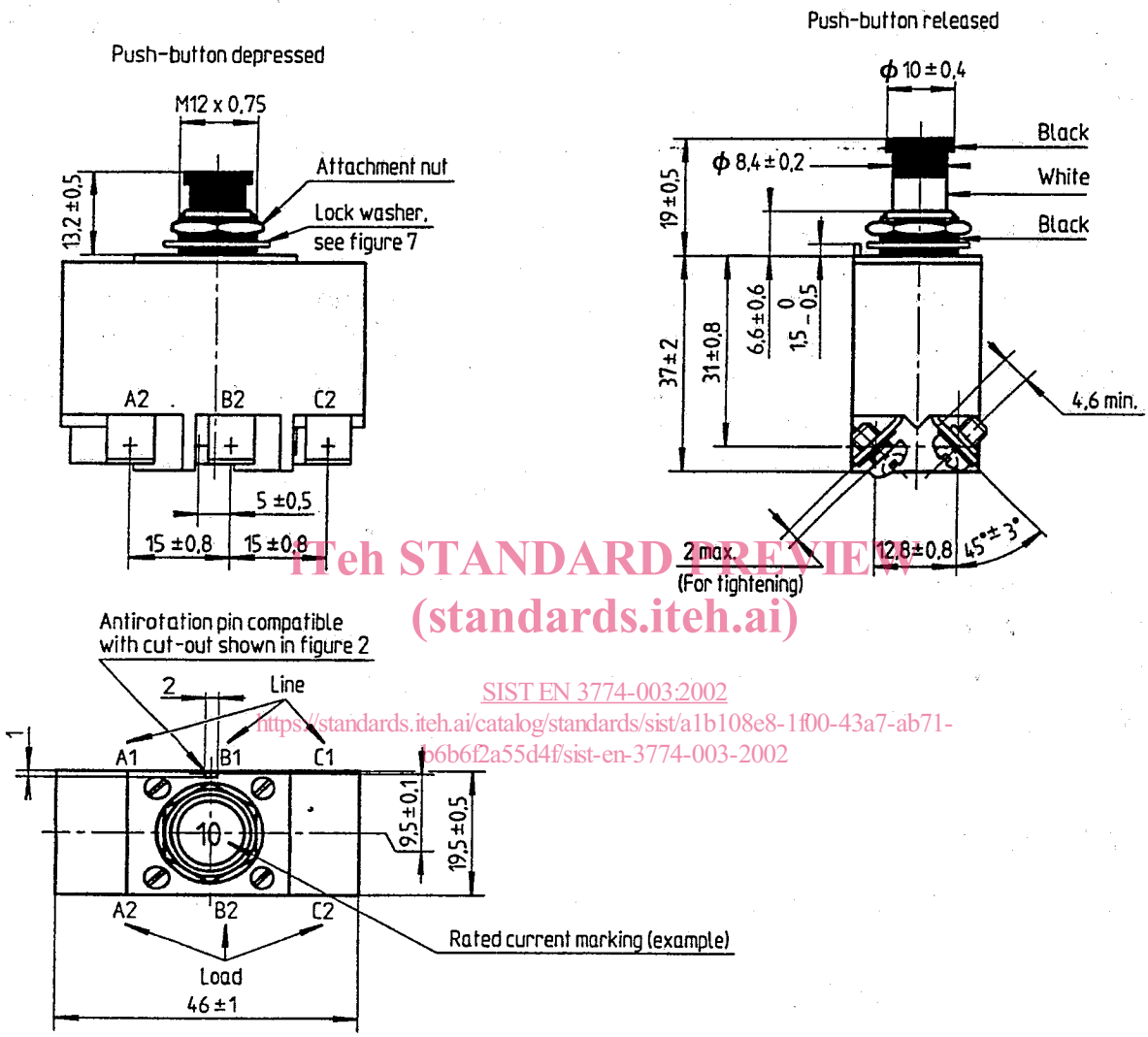

Figure 1: Circuit breaker

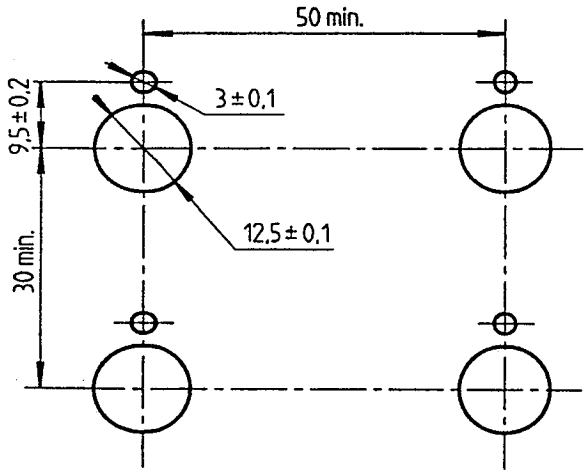

Figure 2: Panel cut-out (panel thickness 1,5 to 3)

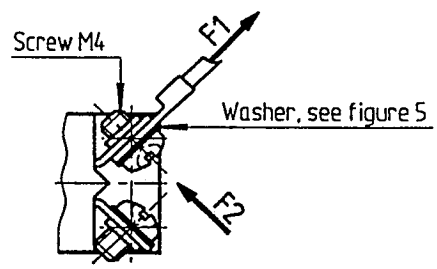

Figure 3: Electrical connection

4.3 Fasteners

Dimensions and tolerances are in millimetres.

4.3.1 For electrical connections

See figures 4 and 5.

Screw: ISO 7045 - M4 x 6 - 4,8 - Z
Material: steel
Protection: zinc plated, passivated, bright

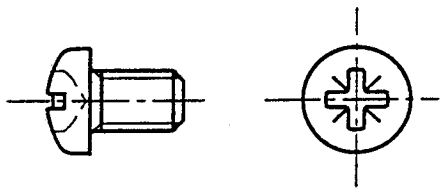

Figure 4: Screw

Two wave corrugated washer
Material: CuBe 1,9 to ISO 1190-1
Hardness: 350 HV to 410 HV

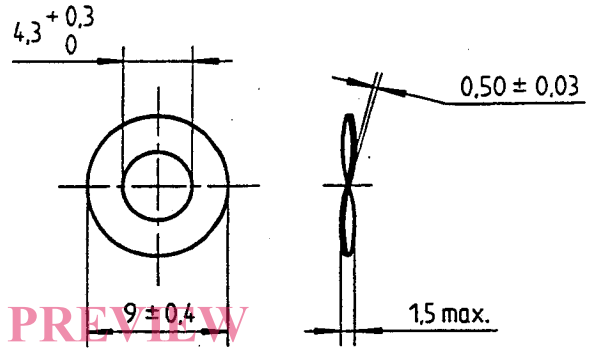

Figure 5: Washer

4.3.2 For mounting

See figures 6 and 7.

Thread to ISO 965-2
Material: aluminium alloy 2017 [1)]
Protection: black sulphur anodized

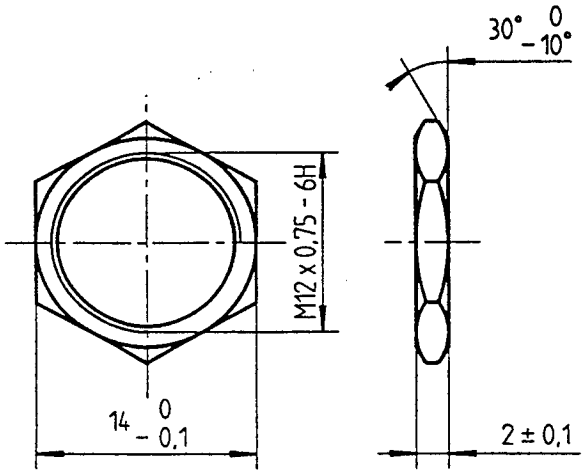

Figure 6: Attachment nut

M12 DIC lock washer (internal serrated teeth)
Material: steel
Hardness: 400 HV to 480 HV
Protection: black zinc dichromate

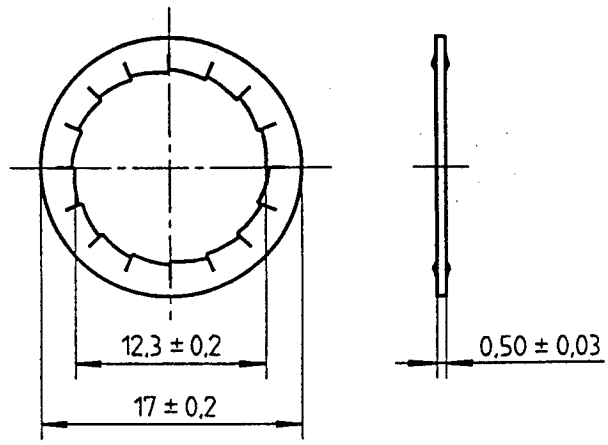

Figure 7: Lock washer

4.4 Mass

Maximum mass: 65 g (provisioning code D)

5 Designation

EXAMPLE:

Description block	Identity block
CIRCUIT BREAKER	**EN3774-003C20AB**

Number of this standard

Design code
C = black button

Rated current code
(See EN 3774-001, table 1)

Provisioning code according to table 1

NOTE: If necessary, the code I9005 shall be placed between the description block and the identity block.

Table 1

Code	Fasteners for terminals			Fasteners for mounting		
	None	Fitted	Supplied separately	None	Fitted	Supplied separately
A	–	–	X	–	–	X
B	X	–	–	–	–	X
C	X	–	–	X	–	–
D	–	X	–	–	X	–
E	X	–	–	–	X	–

6 Marking

See EN 2350.

The provisioning code shall not be marked on the product.