SLOVENSKI STANDARD
SIST EN 2591-7301:2004

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Aerospace series - Elements of electrical and optical connection - Test methods - Part 7301: Electrical elements - Temperature endurance of couplers

Aerospace series - Elements of electrical and optical connection - Test methods - Part 7301: Electrical elements - Temperature endurance of couplers

Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 7301: Elektrische Elemente - Temperaturbeständigkeit von Kopplern

Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais - Partie 7301 : Organes électriques - Endurance des coupleurs en température

Ta slovenski standard je istoveten z: **EN 2591-7301:2001**

ICS:

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

SIST EN 2591-7301:2004 **en**

EUROPEAN STANDARD

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EN 2591-7301

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English version

Aerospace series - Elements of electrical and optical connection - Test methods - Part 7301: Electrical elements - Temperature endurance of couplers

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Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 7301: Elektrische Elemente - Temperaturbeständigkeit von Kopplern

This European Standard was approved by CEN on 4 June 2001.

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 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 Management Centre has the same status as the official versions.

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

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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 May 2002, and conflicting national standards shall be withdrawn at the latest by May 2002.

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 a method of testing the temperature endurance of couplers.

It shall be used together with EN 2591-100.

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.

EN 2591-100	Aerospace series – Elements of electrical and optical connection – Test methods – Part 100: General [1)]
EN 2591-702	Aerospace series – Elements of electrical and optical connection – Test methods – Part 702: Electrical elements – Measurement of signal distortion of couplers

3 Preparation of specimens

Cable length shall not exceed 2 m.

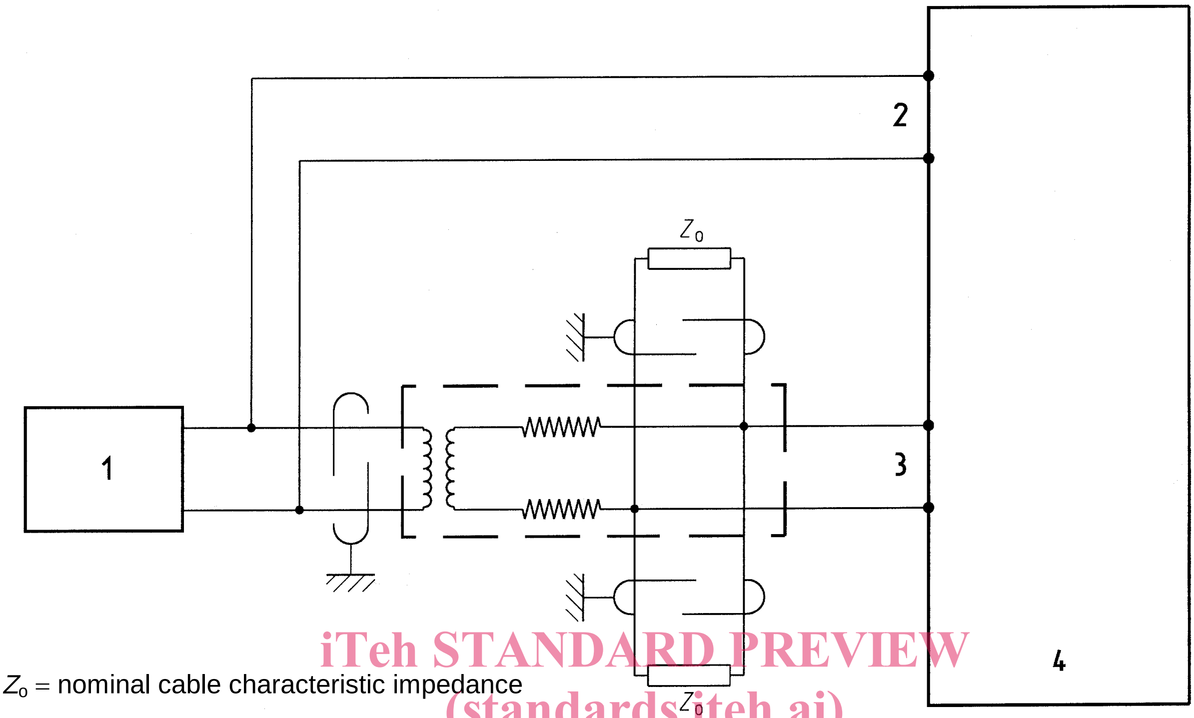
Unless specified in the technical specification, the following details shall be stated:

- duration;
- input signal (shape, frequency, amplitude, rise and fall time);
- measurement and recording periods.

1) Published as AECMA Prestandard at the date of publication of this standard

4 Method

The specimen is connected as shown in figure 1. Unused stubs shall not be terminated.



Z_0 = nominal cable characteristic impedance

Key

1 Signal generator
2 *V* input
3 *V* output
4 Two-way oscilloscope

Figure 1

4.1 Initial measurement

Measure and record waveform.

4.2 Procedure

Test temperature: 0,85 of maximum operating temperature, tolerance: $^{+5}_{0}$ °C

Duration: 1 000 h

The signal shall be square wave, frequency 250 kHz and comply with figure 2 unless otherwise specified in the technical specification. Rise time and fall time shall be 100 ns maximum, measured at 10 % and at 90 % of peak amplitude.

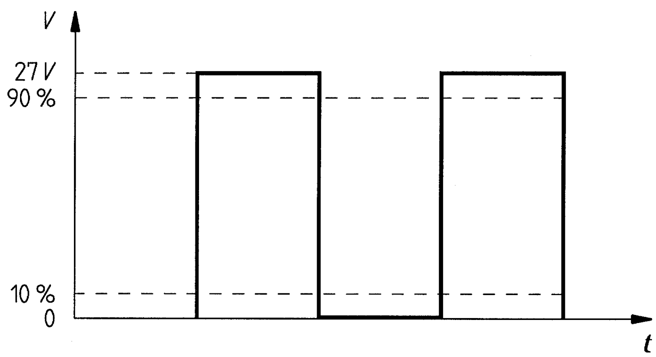


Figure 2 – Input signal

4.3 Requirements

See EN 2591-702.