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**Aerospace series - Elements of electrical and optical connection - Test methods - Part 704: Electrical elements - Measurement of turns ratio on a transformer used in a coupler**

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Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 704: Elektrische Elemente - Messung des Windungsverhältnisses eines Koppelübertragers in einem Koppler

Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais - Partie 704 : Organes électriques - Mesure du rapport des spires sur un transformateur utilisé dans un coupleur

**Ta slovenski standard je istoveten z: EN 2591-704:2001**

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**ICS:**

49.060 Štejni sistemi in oprema za letalstvo in zračne sile Aerospace electric equipment and systems

**SIST EN 2591-704:2004****en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 2591-704**

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ICS 49.060

English version

**Aerospace series - Elements of electrical and optical connection  
- Test methods - Part 704: Electrical elements - Measurement of  
turns ratio on a transformer used in a coupler**

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Elektrische Elemente - Messung des  
Windungsverhältnisses eines Koppelübertragers in einem  
Koppler

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.

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

**Management Centre: rue de Stassart, 36 B-1050 Brussels**

## 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 measuring the turns ratio of a transformer used in a coupler. This method allows also for verification of the input and output voltage phase.

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 <sup>1)</sup>

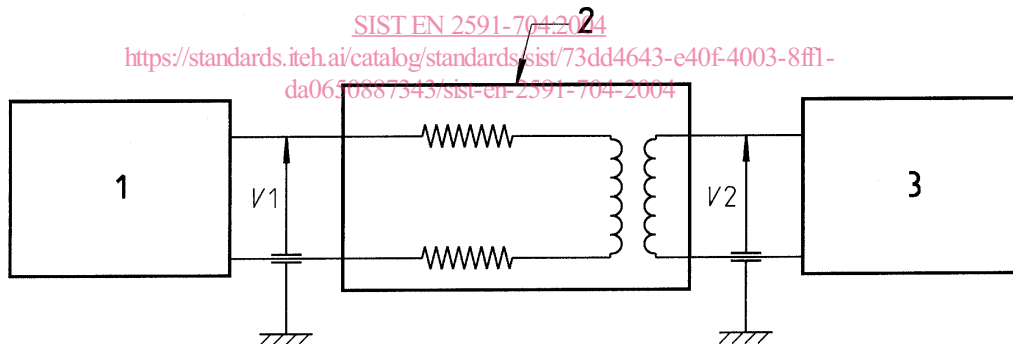
## 3 Preparation of specimens

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

- value of  $N$ , see 4;
- test temperature.

## 4 Method

The test is carried out using a signal generator and an oscilloscope connected as on figure 1.



### Key

- 1 Signal generator
- 2 Coupler
- 3 Oscilloscope

**Figure 1**

The test signal  $V1$  shall be sinusoidal, frequency 250 kHz, 10 V peak to peak.

The turns ratio shall be calculated using the formula:

$$N = \frac{V1}{V2}$$

## 5 Requirements

$N$  shall comply with the value specified in the technical specification.

Voltages  $V1$  and  $V2$  shall be in phase.

<sup>1)</sup> Published as AECMA Prestandard at the date of publication of this standard