

Aerospace series - Elements of electrical and optical connection - Test methods -  
Part 310: Cold

Aerospace series - Elements of electrical and optical connection - Test methods - Part 310: Cold

Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren -  
Teil 310: Kälte **iTeh STANDARD PREVIEW**

# iTeh STANDARD PREVIEW

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Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais -  
Partie 310: Froid SIST EN 2591-310:2001

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<https://standards.iteh.ai/catalog/standards/sist/3e4a4a2b-2248-4ad6-93f9->

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Ta slovenski standard je istoveten z: EN 2591-310:1998

**ICS:**

49.060 Š^cä{ \ a{ä} Á^•[ |b\æ Aerospace electric  
^|v\|d{ } a{[ } |^v\ a{ä} Áäc{ \ a equipment and systems

SIST EN 2591-310:2001

en

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

EN 2591-310

June 1998

ICS

Descriptors: aircraft industry, aircraft equipment, connecting equipment, test

English version

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- Test methods - Part 310: Cold

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This European Standard was approved by CEN on 22 June 1997.

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.

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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.

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

Central Secretariat: 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.

## The STANDARD PREVIEW

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 1998, and conflicting national standards shall be withdrawn at the latest by December 1998.

SIST EN 2591-310:2001

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.

AN DER VORSTELLENDEN STANDAARDEN IN DE  
 WERK IN TECHNISCHE OUTLINES ALS OVERZICHTEN  
 VERSCHIJNEN IN DEZELFDE IN DEZELFDE JAAR  
 AVAILABE  
 TOT  
 VERKRIJGBAARHEID VAN DEZE STANDAARD



## 1 Scope

This standard specifies a method of assessing the ability of elements of connection to function in cold conditions.

It shall be used together with EN 2591.

This method forms part of test EN 2591-302.

## 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 Aerospace series - Elements of electrical and optical connection - Test methods - General

EN 2591-101 Aerospace series - Elements of electrical and optical connection - Test methods - Part 101: Visual examination

EN 2591-206 Aerospace series - Elements of electrical and optical connection - Test methods - Part 206: Measurement of insulation resistance

EN 2591-302 Aerospace series - Elements of electrical and optical connection - Test methods - Part 302: Climatic sequence 1) <https://standards.iteh.ai/catalog/standards/sist/3e4a4a2b-2248-4ad6-93f9-6cde8a4d60be/sist-en-2591-310-2001>

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## 3 Preparation of specimens

**3.1** Specimens shall be prepared according to the technical specification.

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

- specimens mated or unmated and fitted with protective cover (if applicable);
- mounting method, type of cable and definition of specimen wiring;
- type of preconditioning (if applicable);
- initial measurements (if applicable);
- severity (see 5.3);
- final measurements and requirements;
- measurement method according to EN 2591-206 and insulation resistance value.

## 4 Apparatus

The test chamber shall be designed so that its temperature is controlled by sensing devices located at those locations where the specimens are installed.

## 5 Method

### 5.1 Preconditioning

Preconditioning shall take at least 1 h unless otherwise specified.

If required, the specimens shall be mated and unmated the number of times specified before testing.

### 5.2 Initial measurements (if applicable)

They shall be carried out as specified.

### 5.3 Severity

The severity defined by the temperature and exposure time shall be selected from the list below.

#### 5.3.1 Temperature

- $(-65 \pm 2)^\circ\text{C}$
- $(-55 \pm 2)^\circ\text{C}$
- $(-40 \pm 2)^\circ\text{C}$

#### 5.3.2 Exposure time

16 h

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**5.4 Procedure** <https://standards.iteh.ai/catalog/standards/sist/3e4a4a2b-2248-4ad6-93f9-6cde8a4d60be/sist-en-2591-310-2001>

When the test chamber is at the temperature corresponding to the specified severity, the specimens shall be introduced and connected to the measuring instruments.

Exposure time shall be calculated from the moment the chamber has reached thermal stability.

### 5.5 Final measurements and requirements

The specimens shall be subjected to a visual examination (EN 2591-101). They shall show no sign of deterioration which might affect performance.

If applicable, EN 2591-206 test shall be carried out 1 h after completion of exposure.