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**Electromechanical components for electronic equipment - Basic testing procedure and measuring methods - Part 11: Climatic tests - Section 8: 11h - Sand and dust (IEC 60512-11-8:1995)**

Electromechanical components for electronic equipment - Basic testing procedures and measuring methods -- Part 11: Climatic tests -- Section 8: Test 11h - Sand and dust

Elektrisch-mechanische Bauelemente für elektronische Einrichtungen -- Meß- und Prüfverfahren -- Teil 11: Klimatische Prüfungen -- Hauptabschnitt 8: Prüfung 11h - Sand und Staub

Composants électromécaniques pour équipements électroniques - Procédures d'essai de base et méthodes de mesure -- Partie 11: Essais climatiques -- Section 8: Essai 11h - Sable et poussière

**Ta slovenski standard je istoveten z: EN 60512-11-8:1999**

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**ICS:**

31.220.01	Elektromehanske komponente (sestavni deli, gradniki) na splošno	Electromechanical components in general
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**SIST EN 60512-11-8:2002****en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60512-11-8**

January 1999

ICS 19.080; 31.220.01

Descriptors: Electromechanical components, electronic equipment, measuring methods, sand and dust

English version

**Electromechanical components for electronic equipment**  
**Basic testing procedures and measuring methods**  
**Part 11: Climatic tests**  
**Section 8: Test 11h - Sand and dust**  
**(IEC 60512-11-8:1995)**

Composants électromécaniques pour  
équipements électroniques - Procédures  
d'essai de base et méthodes de mesure  
Partie 11: Essais climatiques  
Section 8: Essai 11h - Sable et  
poussière  
(CEI 60512-11-8:1995)

Elektrisch-mechanische Bauelemente für  
elektronische Einrichtungen  
Meß- und Prüfverfahren  
Teil 11: Klimatische Prüfungen  
Hauptabschnitt 8: Prüfung 11h  
Sand und Staub  
(IEC 60512-11-8:1995)

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This European Standard was approved by CENELEC on 1999-01-01. CENELEC 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 CENELEC 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 CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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

**CENELEC**

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung  
Central Secretariat: rue de Stassart 35, B - 1050 Brussels

### Foreword

The text of the International Standard IEC 60512-11-8:1995, prepared by SC 48B, Connectors, of IEC TC 48, Electromechanical components and mechanical structures for electronic equipment, was submitted to the formal vote and was approved by CENELEC as EN 60512-11-8 on 1999-01-01 without any modification.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2000-01-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2000-01-01

This standard is to be used in conjunction with EN 60512-1:1994.

Annexes designated "normative" are part of the body of the standard.  
In this standard, annex ZA is normative.  
Annex ZA has been added by CENELEC.

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The text of the International Standard IEC 60512-11-8:1995 was approved by CENELEC as a European Standard without any modification.

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**Annex ZA (normative)****Normative references to international publications  
with their corresponding European publications**

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 (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60512-7	1993	Electromechanical components for electronic equipment - Basic testing procedures and measuring methods Part 7: Mechanical operating tests and sealing tests	-	-

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NORME  
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1995-11

**Composants électromécaniques pour  
équipements électroniques –  
Procédures d'essai de base et méthodes  
de mesure –**

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**Partie 11:**  
Essais climatiques –  
Section 8: Essai 11h – Sable et poussière

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**Electromechanical components for  
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**Part 11:**  
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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

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For price, see current catalogue

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTROMECHANICAL COMPONENTS FOR  
ELECTRONIC EQUIPMENT – BASIC TESTING PROCEDURES  
AND MEASURING METHODS –**

**Part 11: Climatic tests –  
Section 8: Test 11h – Sand and dust**

## FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters, express as nearly as possible an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
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- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 512-11-8 has been prepared by sub-committee 48B: Connectors, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

This standard cancels and replaces clause 8 of IEC 512-6. It should be used in conjunction with IEC 512-1: General. The complete publication will include other tests which will be issued as they become available.

The text of this standard is based on the following documents:

DIS	Report on voting
48B/409/DIS	48B/446/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.



# ELECTROMECHANICAL COMPONENTS FOR ELECTRONIC EQUIPMENT – BASIC TESTING PROCEDURES AND MEASURING METHODS –

## Part 11: Climatic tests – Section 8: Test 11h – Sand and dust

### 1 General

#### 1.1 Scope and object

This section of IEC 512-11 defines a standard test method to assess the ability of a connector to withstand driving fine sand and dust.

#### 1.2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this section of IEC 512-11. At the time of publication, the edition indicated was valid. All normative documents are subject to revision, and parties to agreements based on this section of IEC 512-11 are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

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IEC 512-7: 1993, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods – Part 7: Mechanical operating tests and sealing tests*

<https://standards.iteh.ai/catalog/standards/sist/6bc49cb8-7f97-4838-acc7-de64f64e7d35/sist-en-60512-11-8-2002>

### 2 Preparation of specimens

The specimens shall be equipped with their normal accessories mounted and wired according to the detail specification. When the detail specification requires it, the specimens shall be mated and unmated as many times as specified, prior to the test. The test shall be performed on mated connectors or on unmated connectors with protective covers.

### 3 Test method

#### 3.1 Initial measurements

Initial measurements shall be made as specified by the detail specification. The specimen shall be subjected to test 13a: Engaging and separating forces, of IEC 512-7. (See also IEC 68-2-68: Test L: Dust and sand.)