

SLOVENSKI STANDARD

SIST HD 478.2.5 S1:2002

01-september-2002

Classification of environmental conditions - Part 2: Environmental conditions appearing in nature - Section 5: Dust, sand, salt mist

Classification of environmental conditions -- Part 2: Environmental conditions appearing in nature -- Section 5: Dust, sand, salt mist

Klassifizierung von Umweltbedingungen -- Teil 2: Natürliche Umweltbedingungen -- Hauptabschnitt 5: Staub, Sand, Salznebel

Classification des conditions d'environnement -- Partie 2: Conditions d'environnement présentes dans la nature -- Section 5: Poussière, sable, brouillard salin

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Ta slovenski standard je istoveten z: HD 478.2.5 S1:1993

ICS:

19.040	Preskušanje v zvezi z okoljem	Environmental testing
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en

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HARMONIZATION DOCUMENT

HD 478.2.5 S1

DOCUMENT D'HARMONISATION

HARMONISIERUNGSDOKUMENT

May 1993

UDC 621.3:620.193.1

Descriptors: Electronic components, electrical equipment, electronical equipment, electrotechnical components, climatic conditions, environment, choice, classification, dust, sand, salt mist

ENGLISH VERSION

Classification of environmental conditions
Part 2: Environmental conditions appearing
in nature
Section 5: Dust, sand, salt mist
(IEC 721-2-5:1991)

Classification des conditions
d'environnement
Partie 2: Conditions
d'environnement présentes dans
la nature
Section 5: Poussière, sable,
brouillard salin
(CEI 721-2-5:1991)

Klassifizierung von
Umweltbedingungen
Teil 2: Natürliche
Umweltbedingungen
Staub, Sand, Salznebel

(IEC 721-2-5:1991)

STANDARD PREVIEW
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SIST HD 478.2.5 S1:2002

This Harmonization Document was approved by CENELEC on 1993-03-09.
CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for implementation of this Harmonization Document on a national level.

Up-to-date lists and bibliographical references concerning national implementation may be obtained on application to the Central Secretariat or to any CENELEC member.

This Harmonization Document exists in three official versions (English, French, German).

CENELEC members are the national electrotechnical committees of Austria, Belgium, 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

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Ref. No. HD 478.2.5 S1:1993 E

FOREWORD

The CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 721-2-5:1991 could be accepted without textual changes, has shown that no common modifications were necessary for the acceptance as Harmonization Document.

The reference document was submitted to the CENELEC members for formal vote and was approved by CENELEC as HD 478.2.5 S1 on 9 March 1993.

The following dates were fixed:

- latest date of announcement
of the HD at national level (doa) 1993-12-01
- latest date of publication of
a harmonized national standard (dop) 1994-06-01
- latest date of withdrawal of
conflicting national standards (dow) 1994-06-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.

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ENDORSEMENT NOTICE

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The text of the International Standard IEC 721-2-5:1991 was approved by CENELEC as a Harmonization Document without any modification.

ANNEX ZA (normative)

OTHER INTERNATIONAL PUBLICATIONS QUOTED IN THIS STANDARD
WITH THE REFERENCES OF THE RELEVANT EUROPEAN PUBLICATIONS

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

IEC Publication	Date	Title	EN/HD	Date
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721-1	1990	Classification of environmental conditions - Part 1: Environmental parameters and their severities	HD 478.1 S1	1992
721-2-2	1988	Part 2: Environmental conditions appearing in nature Precipitation and wind	HD 478.2.2 S1	1990

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NORME INTERNATIONALE INTERNATIONAL STANDARD

**CEI
IEC
721-2-5**

Première édition
First edition
1991-07

Classification des conditions d'environnement

Partie 2:

Conditions d'environnement présentes dans la nature

Section 5: Poussière, sable, brouillard salin

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Classification of environmental conditions

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<https://standards.iteh.ai/catalog/standards/sist/18d17b2d-aeef-492b-81c2-9b8e79b27857/sist-hd-478-2-5-s1-2002>

Part 2:

Environmental conditions appearing in nature

Section 5: Dust, sand, salt mist

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CLASSIFICATION OF ENVIRONMENTAL CONDITIONS

Part 2: Environmental conditions appearing in nature
Section 5: Dust, sand, salt mist

FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

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This section of International Standard IEC 721-2 has been prepared by IEC Technical Committee No. 75: Classification of environmental conditions.

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

Six Months' Rule	Report on Voting
75(CO)62	75(CO)66

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

It should be noted that this section belongs to the second part of a series dealing with the following subjects:

- Environmental parameters and their severities (IEC 721-1)
- Environmental conditions appearing in nature (IEC 721-2)
- Classification of groups of environmental parameters and their severities (IEC 721-3)

INTRODUCTION

This section of IEC 721-2 is intended to be used as part of the background information when selecting appropriate severities of parameters relating to dust, sand and salt mist for product application. The severities given in IEC 721-1 should be applied.

More detailed information on dust, sand and salt mist characteristics may be obtained from specialist documentation, some of which is given in the list of references in annex B.

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CLASSIFICATION OF ENVIRONMENTAL CONDITIONS

Part 2: Environmental conditions appearing in nature Section 5: Dust, sand, salt mist

1 Scope

This section of IEC 721-2 presents characteristics of dust, sand and salt mist appearing in nature, and describes the influences from these environmental factors to which products are liable to be exposed during storage, transportation and use. Although the effect of these factors is often closely associated with and at times enhanced by wind, the environmental factor of wind is not dealt with in this section but in IEC 721-2-2.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this section of IEC 721-2. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this section of IEC 721-2 are encouraged to investigate the possibility of applying the most recent editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

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<https://standards.iteh.ai/catalog/standards/sist/18d17b2d-aeef-492b-81c2-608c79c27857/sist/478-2-5-s1-2002>

IEC 721-1: 1990-12, *Classification of environmental conditions - Part 1: Environmental parameters and their severities*.

IEC 721-2-2: 1988, *Classification of environmental conditions - Part 2: Environmental conditions appearing in nature - Section 2: Precipitation and wind*.

3 General

Dust, sand, salt mist and related wind can have an effect on products in various ways, the most important being:

- ingress of dust into enclosures and encapsulations;
- deterioration of electrical characteristics, e.g. faulty contact, change of contact resistance, change of track resistance;
- seizure or disturbance in motion of bearings, axles, shafts and other moving parts;
- surface abrasion (erosion, corrosion);
- clouding of optical surfaces;
- contamination of lubricants;
- reduction of thermal conductivity;
- clogging of ventilating openings, bushings, pipes, filters, apertures necessary for operation, etc.