



SLOVENSKI STANDARD
SIST EN 60721-1:2001

01-september-2001

Classification of environmental conditions - Part 1: Environmental parameters and their severities

Classification of environmental conditions -- Part 1: Environmental parameters and their severities

Klassifizierung von Umweltbedingungen -- Teil 1: Umwelteinflußgrößen und deren Grenzwerte

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Classification des conditions d'environnement -- Partie 1: Agents d'environnement et leurs sévérités

[SIST EN 60721-1:2001](#)

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Ta slovenski standard je istoveten z: EN 60721-1:1995

ICS:

19.040

Preskušanje v zvezi z
okoljem

Environmental testing

SIST EN 60721-1:2001

en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60721-1

April 1995

UDC 621.3:620;193
ICS 19.040

Supersedes HD 478.1 S2:1994

Descriptors: Electronic component, electrotechnical component, electrical material, storage condition, using condition, environment, atmosphere

English version

Classification of environmental conditions
Part 1: Environmental parameters and their severities
(IEC 721-1:1990 + A1:1992)

Classification des conditions
d'environnement
Partie 1: Agents d'environnement et
leurs sévérités
(CEI 721-1:1990 + A1:1992)

Klassifizierung von Umweltbedingungen
Teil 1: Vorzugswerte für Einflußgrößen
(IEC 721-1:1990 + A1:1992)

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This European Standard was approved by CENELEC on 1995-03-06. 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, 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 721-1:1990 and its amendment 1:1992, prepared by IEC TC 75, Classification of environmental conditions, was approved by CENELEC as HD 478.1 S2 on 1994-03-08.

This Harmonization Document was submitted to the formal vote for conversion into a European Standard and was approved by CENELEC as EN 60721-1 on 1995-03-06.

The following date was 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) 1996-03-01

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.

Endorsement notice

The text of the International Standard IEC 721-1:1990 and its amendment 1:1992 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 68-2-27	1987	Basic environmental testing procedures Part 2: Tests - Test Ea and guidance: Shock	EN 60068-2-27	1993
IEC 79-0 ¹⁾	1983	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements	-	-
IEC 721-2-2	1988	Classification of environmental conditions Part 2: Environmental conditions appearing in nature - Precipitation and wind	HD 478.2.2 S1	1990
IEC 721-3-6	1987	Part 3: Classification of groups of environmental parameters and their severities - Ship environment	EN 60721-3-6 ²⁾	1993
ISO 2041	1975	Vibration and shock - Vocabulary	-	-

1) Instead of IEC 79-0:1983, EN 50014:1992, *Electrical apparatus for potentially explosive atmospheres General requirements*, applies.

2) EN 60721-3-6 includes A1:1991 to IEC 721-3-6.

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NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC
721-1

Deuxième édition
Second edition
1990-12

Classification des conditions d'environnement

Partie 1:

Agents d'environnement et leurs sévérités

Classification of environmental conditions

Part 1:

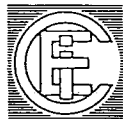
Environmental parameters and their severities

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Descriptive list of environmental parameters and their severity



Numéro de référence
Reference number
CEI/IEC 721-1: 1990

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CLASSIFICATION OF ENVIRONMENTAL CONDITIONS

Part 1: Environmental parameters and their severities

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.

This part of the International Standard IEC 721 has been prepared by IEC Technical Committee No. 75: Classification of environmental conditions.

This second edition of IEC 721-1 replaces the first edition issued in 1981.

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

Six Months' Rule	Report on the Voting
75(CO)57 and 57A	75(CO)65

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

It should be noted that this standard forms one 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 part of IEC 721 contains a list of environmental parameters and their severities. It replaces the first edition of IEC 721-1, which was issued as an IEC Report pending the results of work in IEC Technical Committee No. 75 and other IEC Technical Committees on defining the environmental conditions to which products will be subjected while being transported, stored, installed and used.

The modifications made have been mainly concerned with the list of severities.

The severities in this part are given without reference to their application. Sufficient guidance on application is available in IEC 721-2 and IEC 721-3.

Technical Committees preparing environmental condition specifications for products should apply IEC 721-3 but if, in exceptional cases, severity values of IEC 721-3 are not appropriate, the list in this part should be considered for the selection of values.

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CLASSIFICATION OF ENVIRONMENTAL CONDITIONS

Part 1: Environmental parameters and their severities

1 Scope

This part of IEC 721 lists environmental parameters and a limited number of their severities within the range of conditions met by electrotechnical products when being transported, stored, installed and used.

2 Normative references

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

IEC 68-2-27: 1987, Environmental testing. Part 2: Tests – Test Ea and Guidance: Shock.

IEC 79-0: 1983, Electrical apparatus for explosive gas atmospheres – Part 0: General requirements.

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

IEC 721-3-6: 1987, Classification of environmental conditions – Part 3: Classification of groups of environmental parameters and their severities – Ship environment.

ISO 2041: 1975, Vibration and shock – Vocabulary.

[SIST EN 60721-1:2001](https://standards.iteh.ai/catalog/standards/sist/6e42fc17-7725-453e-98b2-3c35be24d799/sist-en-60721-1-2001)

3 Definitions

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For the purposes of this part of IEC 721, the following definitions apply:

3.1 environmental condition: Physical, chemical or biological condition, external to a product, to which it is subjected at a certain time.

NOTE – Environmental conditions are generally composed of environmental conditions appearing in nature and environmental conditions generated by the product itself or by external sources.

3.2 environmental factor: A physical, chemical or biological influence which, either singly or in combination with other influences, produces an environmental condition (e.g. heat, vibration).