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**Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 4: Stationary use at non-weatherprotected locations**

Classification of environmental conditions -- Part 3: Classification of groups of environmental parameters and their severities -- Section 4: Stationary use at non-weatherprotected locations

Klassifizierung von Umweltbedingungen -- Teil 3: Klassen von Umwelteinflußgrößen und deren Grenzwerte -- Hauptabschnitt 4: Ortsfester Einsatz, nicht wettergeschützt

Classification des conditions d'environnement -- Partie 3: Classification des groupements des agents d'environnement et de leurs sévérités -- Section 4: Utilisation à poste fixe, non protégé contre les intempéries

**Ta slovenski standard je istoveten z: EN 60721-3-4:1995**

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**ICS:**

19.040	Preskušanje v zvezi z okoljem	Environmental testing
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**SIST EN 60721-3-4:2001****en**

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 60721-3-4**

February 1995

ICS 19.040

Supersedes EN 60721-3-4:1993 and its amendment

Descriptors: Environmental conditions, stationery use at non-weather protected locations

English version

**Classification of environmental conditions**  
**Part 3: Classification of groups of environmental parameters**  
**and their severities**  
**Section 4: Stationary use at non-weatherprotected locations**  
**(IEC 721-3-4:1995)**

Classification des conditions  
d'environnement

Partie 3: Classification des groupements  
des agents d'environnement et de leurs  
sévérités

Section 4: Utilisation à poste fixe, non  
protégé contre les intempéries  
(CEI 721-3-4:1995)

Klassifizierung von Umweltbedingungen

Teil 3: Klassen von

Umwelteinflußgrößen und deren

Grenzwerte

Hauptabschnitt 4: Ortsfester Einsatz,

nicht wettergeschützt

(IEC 721-3-4:1995)

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This European Standard was approved by CENELEC on 1994-10-04. 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 document 75(CO)103A, future amendment to IEC 721-3-4:1987, prepared by IEC TC 75, Classification of environmental conditions, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A3 to EN 60721-3-4:1993 on 1994-10-04.

The text of this document, together with that of IEC 721-3-4:1987 and its amendments 1:1991 and 2:1993, was published by IEC as the second edition of IEC 721-3-4 in January 1995. According to a decision of principle taken by the Technical Board of CENELEC, the approval of EN 60721-3-4:1993/A3 has been converted into the approval of a new EN 60721-3-4.

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) 1996-01-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 1996-01-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annex ZA is normative and annexes A, B, C and D are informative.

Annex ZA has been added by CENELEC.

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#### Endorsement notice

The text of the International Standard IEC 721-3-4:1995 was approved by CENELEC as a European Standard without any modification.

## ANNEX ZA (normative)

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

NOTE : 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 A1	1990 1992	Classification of environmental conditions - Part 1: Environmental parameters and their severities	HD 478.1 S2	1994
721-2-1 A1	1982 1987	Part 2: Environmental conditions appearing in nature - Section 1: Temperature and humidity	HD 478.2.1 S1	1989
721-3-0 A1	1984 1987	Part 3: Classification of groups of environmental parameters and their severities Section 0: Introduction	EN 60721-3-0	1993

EN 60721-3-4:2001  
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# NORME INTERNATIONALE INTERNATIONAL STANDARD

**CEI  
IEC  
721-3-4**

Deuxième édition  
Second edition  
1995-01

## Classification des conditions d'environnement –

### Partie 3:

Classification des groupements des agents  
d'environnement et de leurs sévérités –

Section 4: Utilisation à poste fixe,  
non protégé contre les intempéries

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## Classification of environmental conditions –

### Part 3:

Classification of groups of environmental  
parameters and their severities –

Section 4: Stationary use at non-weatherprotected  
locations

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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 3: Classification of groups of environmental parameters  
and their severities –****Section 4: Stationary use at non-weatherprotected locations**

## 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, 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.
- 3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.

International Standard IEC 721-3-4 has been prepared by IEC technical committee 75: Classification of environmental conditions.

This second edition cancels and replaces the first edition published in 1987, amendment 1, published in June 1991, and amendment 2, published in July 1993, and constitutes a technical revision.

The text of this standard is based on the first edition, amendments 1 and 2 and on the following documents:

DIS	Report on voting
75(CO)103A	75(CO)111A

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

IEC 721 consists of the following parts, under the general title *Classification of environmental conditions*:

- Part 1, Environmental parameters and their severities
- Part 2, Environmental conditions appearing in nature
- Part 3, Classification of groups of environmental parameters and their severities

Annexes A to D are for information only.

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## CLASSIFICATION OF ENVIRONMENTAL CONDITIONS –

### Part 3: Classification of groups of environmental parameters and their severities –

#### Section 4: Stationary use at non-weatherprotected locations

##### 1 Scope

This section of IEC 721-3 classifies groups of environmental parameters and their severities to which products are subjected when mounted for stationary use at locations which are non-weatherprotected, including periods of erection work, downtime, maintenance and repair.

Locations which are non-weatherprotected, where products may be mounted for stationary use permanently or temporarily, include land-based and offshore locations. Use in and on vehicles is excepted.

The environmental conditions specified in this standard are limited to those which may directly affect the performance of products. Only environmental conditions as such are considered. No special description of the effects of these conditions on the products is given.

Environmental conditions directly related to fire or explosion hazards and conditions related to ionizing radiation are excluded. Any other unforeseen incidents are also excluded. The possibility of their occurrence should be taken into account in special cases.

Microclimate within a product is not included.

Conditions of stationary use at weatherprotected locations, portable and non-stationary use, use in vehicles and ships, and conditions of storage and transportation are given in other sections of IEC 721-3.

A limited number of classes of environmental conditions is given, covering a broad field of application. The user of this standard should select the lowest classification necessary for covering the conditions of the intended use. Some guidance for this is given in annex A.

##### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this section of IEC 721-3. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this section of IEC 721-3 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 721-1: 1990, *Classification of environmental conditions – Part 1: Environmental parameters and their severities*  
Amendment 1 (1992)

IEC 721-2-1: 1982, *Classification of environmental conditions – Part 2: Environmental conditions appearing in nature – Section 1: Temperature and humidity*  
Amendment 1 (1987)

IEC 721-3-0: 1984, *Classification of environmental conditions – Part 3: Classification of groups of environmental parameters and their severities – Section 0: Introduction*  
Amendment 1 (1987)

### 3 Definitions

In addition to the definitions in clause 3 of IEC 721-1, the following definitions apply to this standard:

**3.1 stationary use:** The product is mounted firmly on the structure or on mounting devices, or it is permanently placed at a certain site. It is not intended for portable use, but short periods of handling during erection work, downtime, maintenance and repair at the location are included.

**3.2 location which is non-weatherprotected:** A location at which the product is not protected from direct weather influences.

### 4 General

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For further general guidance, see IEC 721-3-0.

During periods of erection work, which are often connected with downtime, the user should be aware that conditions might differ from those during operation. Therefore, the selection of another class may be necessary for this period, unless special precautions have been taken.

The severities specified are those which will have a low probability of being exceeded. All specified values are maximum or limit values. These values may be reached, but do not occur permanently. Depending on the local situation, there may be different frequencies of occurrence related to a certain period of time. Such frequencies of occurrence have not yet been included in this standard, but should be considered for any environmental parameter. They should be specified additionally if applicable. Information on duration and frequency of occurrence is included in IEC 721-3-0 as clause 6.

Attention is drawn to the fact that combinations of the environmental parameters given may increase the effect on a product. This applies especially to the presence of high relative humidity in addition to biological conditions, or to conditions of chemically or mechanically active substances.

The environmental conditions present at a location may be affected by other influences, for example heat dissipation sources, special process conditions, etc.