

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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

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





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COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## CLASSIFICATION OF ENVIRONMENTAL CONDITIONS –

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

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). 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. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60721-3-4 has been prepared by IEC technical committee 104: Environmental conditions, classification, and methods of test.

This third edition cancels and replaces the second edition published in 1995 and Amendment 1:1996. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) Clause 1: reworded.
- b) Clause 2: normative references have been updated.
- c) Clause 3: definitions have been updated.
- d) Clause 4: reworded and simplified.

- e) Clause 5: revised and updated. Several classes have been replaced by completely new classes based on the use of new information obtained from referenced technical reports.
- f) Defined values of chemically active substances are now by reference to ISO 9223.
- g) Tables 1 through 5: updated.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
104/828/FDIS	104/836/RVD

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

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60721 series, published under the general title *Classification of environmental conditions*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

## CLASSIFICATION OF ENVIRONMENTAL CONDITIONS –

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

#### 1 Scope

This part of IEC 60721 classifies groups of environmental parameters and their severities to which products are subjected when installed for stationary use at non-weatherprotected locations. Weatherprotected locations where products can be mounted for stationary use permanently or temporarily are addressed in IEC 60721-3-3.

The environmental conditions specified in this document are limited to those which can 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 provided.

Environmental conditions directly related to fire or explosion hazards, microclimate within a product, and conditions related to effects from ionizing radiation are excluded. Any other unforeseen incidents are also excluded.

A limited number of classes of environmental conditions is given, covering a broad field of application.

#### 2 Normative references

There are no normative references in this document.

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

##### 3.1

##### **stationary use**

use of a product mounted firmly on a structure, or permanently placed at a certain site

##### 3.2

##### **non-weatherprotected location**

location at which a product is not protected from meteorological conditions

##### 3.3

##### **sheltered location**

location at which a product is covered by a structure to protect it from direct meteorological conditions, i.e. direct sunlight, heavy rain