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

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

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This consolidated version of the official IEC Standard and its amendment has been prepared for user convenience.

IEC 60721-3-3 edition 3.1 contains the third edition (2019-05) [documents 104/829/FDIS and 104/837/RVD] and its amendment 1 (2026-09) [documents 104/1188/FDIS and 104/1204/RVD].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

International Standard IEC 60721-3-3 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 1994, Amendment 1: 1995 and Amendment 2:1996. This edition constitutes a technical revision.

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

a) Clause 3: definitions aligned with IEC 60721-3-1.
b) Clause 4: aligned with IEC 60721-3-1.
c) Clause 5: Clause A.3 has been incorporated into Clause 5.
d) Subclause 5.2: all existing climate classes have been replaced by completely new classes. The new classes are divided into two groups. The reason for the new classes is the latest revision of IEC 60721-2-1 which incorporates new climate types.
e) Subclause 5.3: addition of a new class for low air pressure.
f) Defined values of chemically active substances are now by reference to ISO 9223.
g) Subclause 5.6: all existing classes for mechanically active substances have been replaced by completely new classes, in alignment with IEC 60721-3-1.
h) Subclause 5.7: all existing classes for mechanical conditions have been replaced by completely new classes, in alignment with IEC 60721-3-1.
i) Table 1: new climatic classes with new severities.
j) Table 2: new class for low air pressure.
k) Table 4: new mechanically active substances classes.
l) Table 5: new mechanical conditions classes.
m) Annex A: revised and includes a clean climatogram.
n) Annex B: revised and includes the definition of seismic environment.
o) All classes regarding fire, all combined classes, all chemically active substances classes, Clause A.2, Annexes C, D and E have been removed.

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

FDIS	Report on voting
104/829/FDIS	104/837/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 and its amendment will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

– reconfirmed,
– withdrawn, or
– revised.

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 weatherprotected locations.

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 explosion hazards, microclimate within a product, fire extinction and ionizing radiation are excluded. Any other unforeseen incidents are also excluded. The possibility of their occurrence can be considered as special cases. This document does not cover equipment covered by building standards, codes or regulations.

Conditions of stationary use at non-weatherprotected locations, portable and non-stationary use, use in vehicles and ships, conditions of storage and transportation, and microclimates inside products are given in other parts of the IEC 60721-3 series.

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

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60721-3-0, *Classification of environmental conditions – Part 3: Classification of groups of environmental parameters and their severities – Introduction*

IEC 60721-1, *Classification of environmental conditions – Part 1: Environmental parameters and their severities*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60721-1 and the following 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
weatherprotected location
location at which a product is protected from direct exposure to meteorological conditions