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Klassifikation af miljømæssige betingelser – Del 3-3: Klassifikation af grupper af miljømæssige påvirkningsparametre samt deres alvorsgrad – Stationær brug på lokationer beskyttet mod vejrlig

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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DS projekt: M324587

ICS: 19.040

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IDT med: EN IEC 60721-3-3:2019

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EUROPÄISCHE NORM

July 2019

ICS 19.040

Supersedes EN 60721-3-3:1995 and all of its amendments and corrigenda (if any)

English Version

Classification of environmental conditions - Part 3-3:
Classification of groups of environmental parameters and their
severities - Stationary use at weatherprotected locations
(IEC 60721-3-3:2019)

Classification des conditions d'environnement - Partie 3-3:
Classification des groupements des agents
d'environnement et de leurs sévérités - Utilisation à poste
fixe, protégé contre les intempéries
(IEC 60721-3-3:2019)

Klassifizierung von Umgebungsbedingungen - Teil 3-3:
Klassen von Einflussgrößen und deren Grenzwerte –
Ortsfester Einsatz, wettergeschützt
(IEC 60721-3-3:2019)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

The text of document 104/829/FDIS, future edition 3 of IEC 60721-3-3, prepared by IEC/TC 104 "Environmental conditions, classification and methods of test" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60721-3-3:2019.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-03-26
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-06-26

This document supersedes EN 60721-3-3:1995 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 60721-3-3:2019 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60068-2-27	NOTE	Harmonized as EN 60068-2-27
IEC 60068-3-3	NOTE	Harmonized as EN 60068-3-3
IEC 60721-2 (series)	NOTE	Harmonized as EN 60721-2 (series)
IEC 60721-2-1	NOTE	Harmonized as EN 60721-2-1
IEC 60721-2-2	NOTE	Harmonized as EN 60721-2-2
IEC 60721-2-3	NOTE	Harmonized as EN 60721-2-3
IEC 60721-2-4	NOTE	Harmonized as EN IEC 60721-2-4
IEC 60721-2-5	NOTE	Harmonized as HD 478.2.5 S1
IEC 60721-2-6:1990	NOTE	Harmonized as HD 478.2.6 S1:1993 (not modified)
IEC 60721-3 (series)	NOTE	Harmonized as EN 60721-3 (series)
ISO 9223	NOTE	Harmonized as EN ISO 9223

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Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60721-1	-	Classification of environmental conditions - Part 1: Environmental parameters and their severities	EN 60721-1	-
IEC 60721-3-0	-	Classification of environmental conditions. Part 3: Classification of groups of environmental parameters and their severities. Introduction	-	-

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Edition 3.0 2019-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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

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



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67 000 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

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La Commission Electrotechnique Internationale (IEC) est la première organisation mondiale qui élabore et publie des Normes internationales pour tout ce qui a trait à l'électricité, à l'électronique et aux technologies apparentées.

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Edition 3.0 2019-05

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Part 3-3: Classification of groups of environmental parameters
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**Classification des conditions d'environnement –
Partie 3-3: Classification des groupements des agents d'environnement et de
leurs sévérités – Utilisation à poste fixe, protégé contre les intempéries**

INTERNATIONAL
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INTERNATIONALE

ICS 19.040

ISBN 978-2-8322-6954-1

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CLASSIFICATION OF ENVIRONMENTAL CONDITIONS –

Part 3-3: Classification of groups of environmental parameters and their severities – Stationary use at 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 60721-3-3 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.

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- 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 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.

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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

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*