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Miljöklassificering – Del 3-2: Grupper av miljöfaktorer och deras strängheter – Transport och hantering

*Classification of environmental conditions –
Part 3-2: Classification of groups of environmental parameters and their severities –
Transportation and handling*

Som svensk standard gäller europastandarden EN IEC 60721-3-2:2018. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 60721-3-2:2018.

Nationellt förord

Europastandarden EN IEC 60721-3-2:2018

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60721-3-2, Third edition, 2018 - Classification of environmental conditions - Part 3-2: Classification of groups of environmental parameters and their severities - Transportation and handling**

utarbetad inom International Electrotechnical Commission, IEC.

EN från CENELEC som är identiska med motsvarande IEC-standarder och som görs tillgängliga för nationalkommittéerna efter den 1 januari 2018 får en beteckning som inleds med EN IEC istället för som tidigare bara EN.

Tidigare fastställd svensk standard SS-EN 60721-3-2, utgåva 1, 2001, gäller ej fr o m 2021-03-30.

ICS 19.040.00

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English Version

**Classification of environmental conditions - Part 3-2:
Classification of groups of environmental parameters and their
severities - Transportation and Handling
(IEC 60721-3-2:2018)**

Classification des conditions d'environnement - Partie 3-2:
Classification des groupements des agents
d'environnement et de leurs sévérités - Transport et
manutention
(IEC 60721-3-2:2018)

Klassifizierung von Umgebungsbedingungen - Teil 3-2:
Klassifizierung von Einflussgrößen in Gruppen und deren
Schärfegrade - Transport und Handhabung
(IEC 60721-3-2:2018)

This European Standard was approved by CENELEC on 2018-03-30. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

European foreword

The text of document 104/773/FDIS, future edition 3 of IEC 60721-3-2, 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 60721-3-2:2018.

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) 2018-12-30
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-03-30

This document supersedes EN 60721-3-2:1997.

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 60721-3-2:2018 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 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 60721-2-9	NOTE	Harmonized as EN 60721-2-9.
IEC 60721-3 (series)	NOTE	Harmonized as EN 60721-3 (series).
IEC 60721-3-0	NOTE	Harmonized as EN 60721-3-0.
IEC 60721-3-1	NOTE	Harmonized as EN 60721-3-1.

Annex ZA (normative)

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 - EN 60721-1 - Part 1: Environmental parameters and their severities		-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CLASSIFICATION OF ENVIRONMENTAL CONDITIONS –

Part 3-2: Classification of groups of environmental parameters and their severities – Transportation and handling

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 60721-3-2 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 1997, and constitutes a technical revision.

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

- a) Clause 1: reworded and added handling.
- b) Clause 2: updated normative references.
- c) Clause 3: updated definitions.
- 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) Table 1 through Table 5: updated.
- g) Table 6 added.
- h) Old annexes A to C removed except Clause A.3 that is incorporated in Clause 5.
- i) New Annex A.

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

FDIS	Report on voting
104/773/FDIS	104/783/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 3-2: Classification of groups of environmental parameters and their severities – Transportation and handling

1 Scope and object

This part of IEC 60721 classifies the groups of environmental parameters and their severities to which a product is subjected while being transported and handled.

The most commonly used methods of transportation and handling have been taken into account, including the following:

- road transport: cars, trucks;
- rail transport: trains, trams;
- water transport, inland and maritime: ships;
- air transport: aircraft, jet, propeller, helicopter;
- handling equipment: cranes, transport lifts, cableways, persons;
- conveyors;
- hand trollies.

The environmental conditions specified in this document are those that the product can be exposed to while transported and handled. If the product is packaged, the environmental conditions apply to the package containing the product. If the product is unpackaged, the environmental conditions apply to the product.

Conditions for storage are given in IEC 60721-3-1.

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