

Classification of environmental conditions - Part 3-5:
Classification of groups of environmental parameters
and their severities - Ground vehicle installations

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN IEC 60721-3-5:2026 sisaldab Euroopa standardi EN IEC 60721-3-5:2026 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 27.02.2026.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN IEC 60721-3-5:2026 consists of the English text of the European standard EN IEC 60721-3-5:2026.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 27.02.2026.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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ICS 19.040

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English Version

Classification of environmental conditions - Part 3-5:
Classification of groups of environmental parameters and their
severities - Ground vehicle installations
(IEC 60721-3-5:2026)

Classification des conditions d'environnement - Partie 3-5:
Classification des groupements des agents
d'environnement et de leurs sévérités - Installations de
véhicules terrestres
(IEC 60721-3-5:2026)

Klassifizierung von Umgebungsbedingungen - Teil 3-5:
Klassen von Einflussgrößen und deren Grenzwerte -
Einsatz an und in Landfahrzeugen
(IEC 60721-3-5:2026)

This European Standard was approved by CENELEC on 2026-02-18. 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.

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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

European foreword

The text of document 104/1138/FDIS, future edition 3 of IEC 60721-3-5, prepared by TC 104 "Environmental conditions, classification and methods of test" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60721-3-5:2026.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2027-02-28 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2029-02-28 document have to be withdrawn

This document supersedes EN 60721-3-5:1997 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.

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Endorsement notice

The text of the International Standard IEC 60721-3-5:2026 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 standard indicated:

IEC 60068-2-74	NOTE	Approved as EN 60068-2-74
IEC 60721-2-1	NOTE	Approved as EN 60721-2-1
IEC 60721-2-2	NOTE	Approved as EN IEC 60721-2-2
IEC 60721-2-3	NOTE	Approved as EN 60721-2-3
IEC 60721-2-4	NOTE	Approved as EN IEC 60721-2-4
IEC 60721-2-5	NOTE	Approved as HD 478.2.5 S1
IEC 60721-3 (series)	NOTE	Approved as EN IEC 60721-3 (series)
IEC 60721-3-0	NOTE	Approved as EN IEC 60721-3-0
IEC 60721-3-1	NOTE	Approved as EN IEC 60721-3-1
IEC 60721-3-2	NOTE	Approved as EN IEC 60721-3-2
IEC 60721-3-5:1997	NOTE	Approved as EN 60721-3-5:1997 (not modified)
ISO 9223	NOTE	Approved as EN ISO 9223

INTERNATIONAL STANDARD

**Classification of environmental conditions -
Part 3-5: Classification of groups of environmental parameters and their
severities - Ground vehicle installations**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Classification of environmental conditions -
Part 3-5: Classification of groups of environmental parameters
and their severities - Ground vehicle installations**

FOREWORD

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IEC 60721-3-5 has been prepared by IEC technical committee 104: Environmental conditions, classification and methods of test. It is an International Standard.

This third edition cancels and replaces the second edition, published in 1997. This edition constitutes a technical revision.

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

- a) most classes have been replaced by completely new classes based on the use of additional information obtained from referenced Technical Reports;
- b) Table 1 through to Table 7 have been reviewed and updated;
- c) the content of Annex A and Annex B has either been incorporated into the main body of the document or deleted.

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

Draft	Report on voting
104/1138/FDIS	104/1146/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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 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 the groups of environmental parameters and their severities to which a product, not forming part of the vehicle, is subjected when installed on or in a ground vehicle. Such products are for example radios, communication systems, fare meters, flow meters for liquids transported by the vehicle, for example milk, petroleum products, etc. Vehicles where products can be permanently or temporarily installed include

- road vehicles: passenger cars, commercial vehicles, special vehicles, towing vehicles, trailers, mopeds, motorcycles,
- rail vehicles: trains, trams,
- tracked vehicles: excavators, cranes, rubber tracked vehicles,
- overland vehicles: four-wheel drive cars, tractors, snow scooters,
- handling and storage vehicles: fork-lift trucks (manual and robot), luggage transporters, and
- self-propelled machinery: diggers, harvesters.

Although this document is not intended for products forming part of the vehicles, the environmental condition classification can also be used for some exchangeable parts, installed in a similar way and in the same locations of the vehicle as products which do not form part of the vehicle. Only severe conditions which can be harmful to products are included.

Conditions of storage, transportation and handling are given in IEC 60721-3-1 and IEC 60721-3-2. Classification of storage and transportation environmental conditions are given in other subparts of the IEC 60721-3 series.

Accidental incidents are not included, but it can be important to take their occurrence into account for products vital to the safety of the ground vehicle.

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*

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 terminology databases for use in standardization at the following addresses:

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

3.1

internally mounted

mounted internally in the vehicle, in a compartment which affords some protection from the environment, ranging from complete isolation from external influences to protection only from precipitation when the vehicle is not moving