



BSI Standards Publication

Classification of environmental conditions

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

This is a preview of BS EN IEC 60721-3-5:2026. [Click here to purchase the full version from the ANSI store.](#)

National foreword

This British Standard is the UK implementation of EN IEC 60721-3-5:2026. It is identical to IEC 60721-3-5:2026. It supersedes BS EN 60721-3-5:1997, which will be withdrawn on 28 February 2029.

The UK participation in its preparation was entrusted to Technical Committee GEL/104, Environmental conditions, classification and testing.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Amendments/corrigenda issued since publication

Date	Text affected
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Supersedes EN 60721-3-5:1997

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.

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.

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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 104/1138/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.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

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

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(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.cencenelec.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	-

This is a preview of BS EN IEC 60721-3-5:2026. [Click here to purchase the full version from the ANSI store.](#)

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

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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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.

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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.

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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