SVENSK STANDARD

SS-EN IEC 60721-3-6, utg 2:2026

Fastställd	Sida	Ansvarig kommitté
2026-02-04	1 (19)	SEK TK 104

Miljöklassificering – Del 3-6: Grupper av miljöfaktorer och deras strängheter – Fartygsmiljö

Classification of environmental conditions –
Part 3-6: Classification of groups of environmental parameters and their severities –
Ship environments

Som svensk standard gäller europastandarden EN IEC 60721-3-6:2025. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 60721-3-6:2025.

Nationellt förord

Europastandarden EN IEC 60721-3-6:2025

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 60721-3-6, Second edition, 2025 - Classification of environmental conditions – Part 3-6: Classification of groups of environmental parameters and their severities – Ship environments**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 60721-3-6, utg 1:2001 med eventuella tillägg, ändringar och rättelser gäller ej fr o m 2028-09-30.

ICS 19.040.00

Denna standard är fastställd av SEK Svensk Elstandard,
som också kan lämna upplysningar om **sakinnehållet** i standarden.
Postadress: Box 1042, 172 21 Sundbyberg
Telefon: 08 - 444 14 00.
E-post: sek@elstandard.se. Internet: elstandard.se

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

Genom att utforma sådana standarder blir säkerhetsfordringar tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

SEK Svensk Elstandard

Box 1042
172 21 Sundbyberg
Tel 08-444 14 00
elstandard.se

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60721-3-6

September 2025

ICS 19.040

Supersedes EN 60721-3-6:1993; EN 60721-3-6:1993/A2:1997

English Version

Classification of environmental conditions - Part 3-6: Classification of groups of environmental parameters and their severities - Ship environments (IEC 60721-3-6:2025)

Classification des conditions d'environnement - Partie 3-6: Classification des groupements des agents d'environnement et de leurs sévérités - Environnement des navires (IEC 60721-3-6:2025)

Klassifizierung von Umgebungsbedingungen - Teil 3-6: Klassen von Einflussgrößen und deren Grenzwerte - Ausrüstungen auf Schiffen (IEC 60721-3-6:2025)

This European Standard was approved by CENELEC on 2025-08-06. 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye 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

Ref. No. EN IEC 60721-3-6:2025 E

European foreword

The text of document 104/1094/FDIS, future edition 2 of IEC 60721-3-6, 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 60721-3-6:2025.

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) 2026-09-30
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2028-09-30

This document supersedes EN 60721-3-6:1993 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 60721-3-6:2025 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 60721-2 series	NOTE	Approved as EN 60721-2 series
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 60721-3-2	NOTE	Approved as EN IEC 60721-3-2
IEC 60721-3-6:1987	NOTE	Approved as EN 60721-3-6:1993 (not modified)

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.cencenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60721-1	-	Classification of environmental conditions - Part 1: Environmental parameters and their severities	EN 60721-1	-

IEC 60721-3-6

Edition 2.0 2025-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Classification of environmental conditions - Part 3-6: Classification of groups of environmental parameters and their severities - Ship environments

Classification des conditions d'environnement - Partie 3-6: Classification des groupements des agents d'environnement et de leurs sévérités - Environnement des navires

ICS 19.040

ISBN 978-2-8327-0513-1

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

_____

Classification of environmental conditions - Part 3-6: Classification of groups of environmental parameters and their severities - Ship environments

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.
2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
6) All users should ensure that they have the latest edition of this publication.
7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at https://patents.iec.ch. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 60721-3-6 has been prepared by IEC technical committee 104: Environmental conditions, classification and methods of test. It is an International Standard.

This second edition cancels and replaces the first edition, published in 1987, and constitutes a technical revision.

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

a) most classes have been replaced by completely new classes based on the use of new information obtained from referenced Technical Reports;
b) Table 1 through to Table 5 have been updated;
c) the content of Annex A and Annex B has either been incorporated into main body text or deleted.

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

Draft	Report on voting
104/1094/FDIS	104/1113/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 is subjected when installed aboard a ship.

Ships where electrotechnical products may be permanently or temporarily installed include

- ships propelled by mechanical means, including mobile offshore units, and
- ships not propelled by mechanical means, including sailing boats and life rafts.

The classes defined apply to all sizes of ship from pleasure craft to trawlers, ferry boats, icebreakers, cargo ships including tankers.

The areas in which ships normally navigate are

- inland waterways (canals, rivers, lakes etc.),
- coastal waters, and
- oceans.

Areas where ships navigate in ice are also included.

The environmental conditions specified in this document are those that the product can be exposed to whilst permanently or temporarily installed for the running, handling and safety of the ship. The environmental conditions can also be used for other products, installed in a similar way at similar locations.

Accidental incidents are not included but it can be important to take their occurrence into account for products vital to the safety of the ship. The classification also does not cover the effects of water pressure on submerged products.

Classification of storage and transportation environmental conditions are given in other subparts of the IEC 60721-3 series.

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*