



IEC 60721-3-6

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INTERNATIONAL STANDARD

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



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Classification of environmental conditions -
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FOREWORD

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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- a) most classes have been replaced by completely new classes based on the use of new information obtained from referenced Technical Reports;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- withdrawn, or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*

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>