

## **BSI Standards Publication**

## Classification of environmental conditions

Part 3-0: Classification of groups of environmental parameters and their severities — Introduction



#### **National foreword**

This British Standard is the UK implementation of EN IEC 60721-3-0:2020. It is identical to IEC 60721-3-0:2020. It supersedes BS EN 60721-3-0:1993, which will be withdrawn on 11 June 2023.

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.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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#### Amendments/corrigenda issued since publication

Date Text affected

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

### EN IEC 60721-3-0

June 2020

ICS 19.040

Supersedes EN 60721-3-0:1993 and all of its amendments and corrigenda (if any)

#### **English Version**

# Classification of environmental conditions - Part 3-0: Classification of groups of environmental parameters and their severities - Introduction (IEC 60721-3-0:2020)

Classification des conditions d'environnement - Partie 3-0: Classification des groupements des agents d'environnement et de leurs sévérités - Introduction (IEC 60721-3-0:2020) Klassifizierung von Umgebungsbedingungen - Teil 3-0: Klassifizierung von Einflussgrößen in Gruppen und deren Schärfegrade - Einführung (IEC 60721-3-0:2020)

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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

EN IEC 60721-3-0:2020 (E)

#### **European foreword**

The text of document 104/864/FDIS, future edition 2 of IEC 60721-3-0, 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 60721-3-0:2020.

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
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-06-11

This document supersedes EN 60721-3-0:1993 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.

#### **Endorsement notice**

The text of the International Standard IEC 60721-3-0:2020 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 60068-1:2013 NOTE Harmonized as EN 60068-1:2014 (not modified)

IEC 60721-1 NOTE Harmonized as EN 60721-1

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

#### **CLASSIFICATION OF ENVIRONMENTAL CONDITIONS -**

# Part 3-0: Classification of groups of environmental parameters and their severities – Introduction

#### **FOREWORD**

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International Standard IEC 60721-3-0 has been prepared by IEC technical committee 104: Environmental conditions, classification and methods of test.

This second edition cancels and replaces the first edition published in 1984 and Amendment 1:1987. This edition constitutes a technical revision.

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

a) This edition has been extensively simplified to only provide necessary information with regard to the process given in the other parts of IEC 60721-3 and information on class severity has been updated.

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

FDIS	Report on voting
104/864/FDIS	104/867/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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#### INTRODUCTION

This document forms one part of a series dealing with the following subjects:

- Environmental parameters and their severities (IEC 60721-1);
- Environmental conditions appearing in nature (IEC 60721-2);
- Classification of groups of environmental parameters and their severities (IEC 60721-3).

#### CLASSIFICATION OF ENVIRONMENTAL CONDITIONS -

# Part 3-0: Classification of groups of environmental parameters and their severities – Introduction

#### 1 Scope

This part of IEC 60721 provides guidance on the use of all parts of IEC 60721-3. It contains background information including information on the application and limitation of the classes given in various parts of IEC 60721-3 which can be used in the design, limitation of conditions and protection of equipment.

Reference to IEC 60721-3-0 is important in order to avoid misuse of the classes defined in the other parts of IEC 60721-3.

#### 2 Normative references

There are no normative references in this document.

#### 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

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

#### 4 Content and layout

Separate groups of classes of environmental conditions are given for the following product applications:

IEC 60721-3-1: Storage;

IEC 60721-3-2: Transportation and handling;

IEC 60721-3-3: Stationary use at weatherprotected locations;

IEC 60721-3-4: Stationary use at non-weatherprotected locations;

IEC 60721-3-5: Ground vehicle installations;

IEC 60721-3-6: Ship environment;

IEC 60721-3-7: Portable and non-stationary use;

IEC 60721-3-9: Microclimates inside products.

The classes are identified by:

- a digit defining the application (1 for storage, 2 for transportation and handling, 3 for stationary use at weatherprotected locations, etc.);
- a letter for climatic conditions (K), biological conditions (B), chemically active substances
   (C), mechanically active substances (S), mechanical conditions (M) or special climatic conditions (Z). To be extended if necessary;