

BRITISH STANDARD

**BS 7527 :
Section 3.1 :
1991
IEC 721-3-1 :
1987**

*(Incorporating Corrigendum
March 1990)*

Classification of environmental conditions

**Part 3. Classification of groups of environmental
parameters and their severities**

Section 3.1 Storage

(Implementation of CENELEC HD 478.3.1 S1)

Classification des conditions d'environnement
Partie 3. Classification des groupements des
agents d'environnement et leurs sévérités
Section 3.1 Stockage

Klassifizierung von Umweltbedingungen
Teil 3. Klassen von Einflußgrößen
Abschnitt 3.1 Langzeitlagerung

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the General Electrotechnical Standards Policy Committee (GEL/-) to Technical Committee GEL/15, upon which the following bodies were represented:

- Directorate of Telecommunications
- EEA (the Association of Electronics, Telecommunications and Business Equipment Industries)
- Electronic Components Industry Federation
- Ministry of Defence
- National Supervising Inspectorate
- Society of Environmental Engineers
- Society of Motor Manufacturers and Traders Limited

This British Standard, having been prepared under the direction of the General Electrotechnical Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 29 November 1991

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The following BSI references relate to the work on this standard:
Committee reference GEL/15
Special announcement in *BSI News* July 1991

ISBN 0 580 20173 2

Amendments issued since publication

Amd. No.	Date	Text affected

Amendment No. 1
published and effective from 15 August 1993
to BS 7527 : Section 3.1 : 1991

Classification of environmental conditions

Part 3. Classification of groups of environmental parameters
and their severities

Section 3.1 Storage

NOTE. The European Committee for Electrotechnical Standardization (CENELEC) has accepted IEC 721-3-1 : 1987, together with Amendment 1 : 1991, as a European Standard designated as EN 60721-3-1 : 1993. This amendment implements EN 60721-3-1 : 1993 as a British Standard in the BS EN series.

Implementation of European Standard

Front cover

Delete the existing cover page and substitute the attached.

AMD 7909/August 1993

Contents

After the entry for figure 1, insert the following.

'Annex ZA (normative) Other international publications quoted in this standard with the references of the relevant European publications'

AMD 7909/August 1993

National foreword

Immediately after paragraph 1, insert the following new paragraph.

'In 1993 the European Committee for Electrotechnical Standardization (CENELEC) accepted IEC 721-3-1 : 1987, together with Amendment 1 : 1991, as European Standard EN 60721-3-1 : 1993. As a consequence of implementing the European Standard this British Standard is renumbered as BS EN 60721-3-1 and any reference to BS 7527 : Section 3.1 should be read as a reference to BS EN 60721-3-1.'

AMD 7909/August 1993

New EN title page and foreword

Immediately after the national foreword, insert the attached new EN title page and foreword page.

AMD 7909/August 1993

Text of EN 60721-3-1

Amend the text of international standard IEC 721-3-1 in accordance with the details given on the attached pages.

AMD 7909/August 1993

New annex ZA

Immediately after appendix A, insert the new annex ZA.

AMD 7909/August 1993

Classification of environmental conditions

Part 3. Classification of groups of environmental parameters and their severities

Section 3.1 Storage

The European Standard EN 60721-3-1 : 1993 has the status of a
British Standard

Classification des conditions d'environnement
Partie 3. Classification des groupements des
agents d'environnement et leurs sévérités
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Klassifizierung von Umweltbedingungen
Teil 3. Klassen von Einflußgrößen
Abschnitt 3.1 Langzeitlagerung

UDC 621.3 : 620.193

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Descriptors: Environmental conditions, environmental parameters, storage

English version

Classification of environmental conditions Part 3: Classification of groups of environmental parameters and their severities – Storage

(IEC 721-3-1 : 1987 + A1 : 1991)

Classification des conditions d'environnement
Troisième partie: Classification des groupements
des agents d'environnement et de leurs sévérités
Stockage
(CEI 721-3-1 : 1987 + A1 : 1991)

Klassifizierung von Umweltbedingungen
Teil 3: Klassen von Umwelteinflußgrößen und
deren Grenzwerte
Langzeitlagerung
(IEC 721-3-1 : 1987 + A1 : 1991)

This European Standard was approved by CENELEC on 1993-03-09. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B-1050 Brussels

Foreword

At the request of the 72 Technical Board, the text of the International Standard IEC 721-3-1 : 1987 and its amendment 1 : 1991 was submitted to the CENELEC members for formal vote.

The text of the reference document was approved by CENELEC as EN 60721-3-1 on 9 March 1993.

This European Standard replaces HD 478.3.1 S1 : 1990.

The following dates were fixed:

- latest date of publication of
an identical national standard (dop) 1994-03-01
- latest date of withdrawal of
conflicting national standards (dow) 1994-03-01

Annexes designated 'normative' are part of the body of the standard. In this standard, annex ZA is normative.

TABLE I: Classification of climatic conditions

Replace 0,8 by 0,9 in column "1K7" for item e).

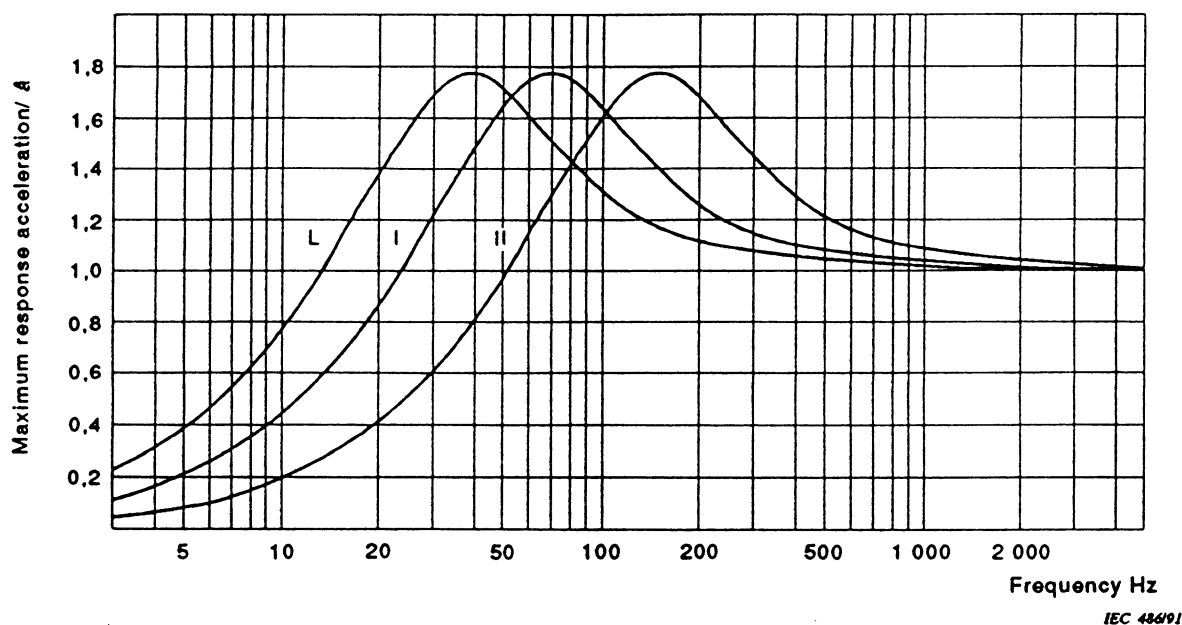
Replace table IV by the following, where the column "1C1L" has been inserted between the columns "Unit" and "1C1". The notes to the original table remain unchanged, except note 5, to which 1C1L covers 3C1L should be added.

TABLE IV

Classification of chemically active substances

Environmental parameter	Unit ¹⁾	Class ⁵⁾					
		1C1L	1C1	1C2		1C3 ³⁾	
		Maximum value	Maximum value	Mean value ²⁾	Maximum value	Mean value ²⁾	Maximum value
a) Sea and road salts	None	No	No ⁴⁾	Salt mist		Salt mist	
b) Sulphur dioxide	mg/m ³	0,1	0,1	0,3	1,0	5,0	10
	cm ³ /m ³	0,037	0,037	0,11	0,37	1,85	3,7
c) Hydrogen sulphide	mg/m ³	0,01	0,01	0,1	0,5	3,0	10
	cm ³ /m ³	0,0071	0,0071	0,071	0,36	2,1	7,1
d) Chlorine	mg/m ³	0,01	0,1	0,1	0,3	0,3	1
	cm ³ /m ³	0,0034	0,034	0,034	0,1	0,1	0,34
e) Hydrogen chloride	mg/m ³	0,01	0,1	0,1	0,5	1,0	5,0
	cm ³ /m ³	0,0066	0,066	0,066	0,33	0,66	3,3
f) Hydrogen fluoride	mg/m ³	0,003	0,003	0,01	0,03	0,1	2,0
	cm ³ /m ³	0,0036	0,0036	0,012	0,036	0,12	2,4
g) Ammonia	mg/m ³	0,3	0,3	1,0	3,0	10	35
	cm ³ /m ³	0,42	0,42	1,4	4,2	14	49
h) Ozone	mg/m ³	0,01	0,01	0,05	0,1	0,1	0,3
	cm ³ /m ³	0,005	0,005	0,025	0,05	0,05	0,15
i) Nitrogen oxides (expressed in equivalent values of nitrogen dioxide)	mg/m ³	0,1	0,1	0,5	1,0	3,0	9,0
	cm ³ /m ³	0,052	0,052	0,26	0,52	1,56	4,68

Replace figure 1 by the following:



Example of durations for half-sine pulse:

Spectrum type L: duration 22 ms
Spectrum type I: duration 11 ms
Spectrum type II: duration 6 ms

Figure 1 - Model shock response spectra
(first order maximax shock response spectra).
For explanation see note 6 relating to table I
of IEC 721-1 (1990)

In A2.3:

a) Replace three by four in the introductory passage.

b) Insert, after the introductory passage, the following:

1C1L This class applies to locations where the atmosphere is continuously controlled.

1C1 In addition to the conditions covered by class 1C1L, this...

Annex ZA (normative)

Other international publications quoted in this standard with the references of the relevant European publications

When the international publication has been modified by CENELEC common modifications, indicated by (mod), the relevant EN/HD applies.

IEC Publication	Date	Title	EN/HD	Date
721-1	1981*	Classification of environmental conditions – Part 1: Classification of environmental parameters and their severities	–	–
721-2-1	1982	Part 2: Environmental conditions appearing in nature Temperature and humidity	HD 478.2.1 S1*	1989
721-3-0 A1	1984 1987	Part 3: Classification of groups of environmental parameters and their severities – Introduction	HD 478.3.0 S2	1989
721-3-2	1985	Transportation	–	–
721-3-3	1987	Stationary use at weatherprotected locations	EN 60721-3-3*	1993
721-3-4	1987	Stationary use at non-weatherprotected locations	EN 60721-3-4*	1993

* IEC 721-1 : 1990 is harmonized as HD 478.1 S1 : 1992
 HD 478.2.1 S1 includes A1 : 1987 to IEC 721-2-1
 EN 60721-3-3 includes A1 : 1991 to IEC 721-3-3
 EN 60721-3-4 includes A1 : 1991 to IEC 721-3-4