SLOVENSKI STANDARD
SIST EN 61300-2-20:1999

01-maj-1999

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-20: Tests - Climatic sequence (IEC 61300-2-20:1995)

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures -- Part 2-20: Tests - Climatic sequence

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Grundlegende Prüf- und Meßverfahren -- Teil 2-20: Prüfungen: Klimafolge

Dispositifs d'interconnexion et composants passifs à fibres optiques - Méthodes fondamentales d'essais et de mesures -- Partie 2-20: Essais - Séquence climatique

Ta slovenski standard je istoveten z: **EN 61300-2-20:1997**

ICS:

33.180.20	Povezovalne naprave za optiļ na vlakna	Fibre optic interconnecting devices

SIST EN 61300-2-20:1999 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61300-2-20

August 1997

ICS 33.180.20

English version

Fibre optic interconnecting devices and passive components Basic test and measurement procedures Part 2-20: Tests - Climatic sequence (IEC 61300-2-20:1995)

Dispositifs d'interconnexion et composants passifs à fibres optiques Méthodes fondamentales d'essais et de mesures Partie 2-20: Essais - Séquence climatique (CEI 61300-2-20:1995)

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Grundlegende Prüf- und Meßverfahren Teil 2-20: Prüfungen: Klimafolge (IEC 61300-2-20:1995)

This European Standard was approved by CENELEC on 1997-07-01. 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

Ref. No. EN 61300-2-20:1997 E

Foreword

The text of the International Standard IEC 61300-2-20:1995, prepared by SC 86B, Fibre optic interconnecting devices and passive components, of IEC TC 86, Fibre optics, was submitted to the formal vote and was approved by CENELEC as EN 61300-2-20 on 1997-07-01 without any modification.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1998-06-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1998-06-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61300-2-20:1995 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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

Publication	Year	Title	EN/HD	Year
IEC 60068-1	1988	Environmental testing Part 1: General and guidance	EN 60068-1[1]	1994
IEC 60068-2-1	1990	Part 2: Tests - Tests A: Cold	EN 60068-2-1	1993
A1	1993		A1	1993
IEC 60068-2-2	1974	Part 2: Tests - Test B: Dry heat	EN 60068-2-2[2]	1993
A1	1993		A1	1993
IEC 60068-2-13	1983	Part 2: Tests - Test M: Low air pressure	HD 323.2.13 S1	1987
IEC 60068-2-30	1980	Part 2: Tests - Test Db and guidance: Damp heat, cyclic (12 + 12 hour cycle)		
+ A1	1985		HD 323.2.30 S3	1988
IEC 60068-2-61	1991	Part 2: Test methods - Test Z/ABDM: Climatic sequence	EN 60068-2-61	1993

1) EN 60068-1 includes the corrigendum October 1988 and A1:1992 to IEC 60068-1.

2) EN 60068-2-2 includes supplement A:1976 to IEC 60068-2-2.

NORME INTERNATIONALE
INTERNATIONAL STANDARD

CEI
IEC
1300-2-20

Première édition
First edition
1995-06

Dispositifs d'interconnexion et composants passifs à fibres optiques – Méthodes fondamentales d'essais et de mesures –

Partie 2-20: Essais – Séquence climatique

Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –

Part 2-20: Tests – Climatic sequence

Bureau Central de la Commission Electrotechnique Internationale 3, rue de Varembé Genève, Suisse

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE G

Pour prix, voir catalogue en vigueur
For price, see current catalogue

INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES –

Part 2-20: Tests – Climatic sequence

FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. 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. The 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 the IEC on technical matters, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.

3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.

4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.

International Standard IEC 1300-2-20 has been prepared by sub-committee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

The text of this standard is based on the following documents:

DIS	Report on voting
86B/547/DIS	86B/627/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

IEC 1300 consists of the following parts, under the general title *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures:*

Part 1: General and guidance

Part 2: Tests

Part 3: Examinations and measurements

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES –

Part 2-20: Tests – Climatic sequence

1 General

1.1 *Scope and object*

The purpose of this part of IEC 1300 is to determine the suitability of a fibre optic device to withstand standard climatic sequences consisting of sequential applications of dry heat, damp heat, cold and low air pressure. These conditions may occur in actual use, storage and/or transportation.

1.2 *General description*

The climatic sequence is based on the standard climatic sequence defined in clause 7 of IEC 68-1 and is applicable to fibre optic devices with climatic categories of 4, 10, 21 and 56 days of damp heat. The climatic sequence shall be carried out in accordance with the procedures and severities specified in the detail specification.

This process describes a climatic sequence in which components are exposed to a number of climatic conditioning tests in a fixed order. There are three methods.

1.2.1 *Method 1*

Method 1 consists of first exposing the specimen to high temperatures and then to a cycle of damp heat at 55 °C. The damp heat is immediately followed by a cold test so that any water which has entered the specimen at surface cracks will be frozen and cause further damage. Low air pressure completes the check on the sealing of the specimen.

1.2.2 *Method 2*

Method 2 entails a more severe conditioning which interposes a cold test between each of the damp heat cycles.

1.2.3 *Method 3*

Method 3 entails a short climatic sequence intended for lot-by-lot inspection.

Climatic sequence is normally used after environmental tests such as vibration or bump to verify that the specimen has not been cracked or damaged by the environment.

1.3 *Normative references*

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 1300. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based