



SLOVENSKI STANDARD SIST EN 62077:2002

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Fibre optic circulators - Generic specification (IEC 62077:2001)

Fibre optic circulators - Generic specification

Lichtwellenleiter-Zirkulatoren - Fachgrundspezifikation

Circulateurs à fibres optiques - Spécification générique

Ta slovenski standard je istoveten z: EN 62077:2001

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ICS:

33.180.20 Ú[ç^: [çæ) ^Á æ | æ^Á æ Fibre optic interconnecting
[] cã } æç|æ } æ devices

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EUROPEAN STANDARD

EN 62077

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2001

ICS 33.180.20

English version

**Fibre optic circulators -
Generic specification
(IEC 62077:2001)**Circulateurs à fibres optiques -
Spécification générique
(CEI 62077:2001)Lichtwellenleiter-Zirkulatoren -
Fachgrundspezifikation
(IEC 62077:2001)**iTeh STANDARD PREVIEW****(standards.iteh.ai)**

This European Standard was approved by CENELEC on 2001-04-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELECEuropean Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

Foreword

The text of document 86B/1443/FDIS, future edition 1 of IEC 62077, prepared by SC 86B, Fibre optic interconnecting devices and passive components, of IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62077 on 2001-04-01.

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) 2002-01-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2004-04-01

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

Endorsement notice

The text of the International Standard IEC 62077:2001 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:

	https://standards.iteh.ai/catalog/standards/sist/f389a1ca-eb2f-496b-b9b8-06d3a2d63b4b/sist-en-62077-2002
IEC 60068	NOTE: Harmonized in the EN 60068 and HD 323 series.
IEC 60874	NOTE: Partly harmonized as EN 60874 series.
IEC 60974	NOTE: Partly harmonized as EN 60974 series.
IEC 61753	NOTE: Partly harmonized as EN 61753 series.
IEC 61754	NOTE: Partly harmonized as EN 61754 series.
IEC 61754-2	NOTE: Harmonized as EN 61754-2:1997 (not modified).
IEC 61754-4	NOTE: Harmonized as EN 61754-4:1997 (not modified).
IEC 61754-13	NOTE: Harmonized as EN 61754-13:1999 (not modified).
IEC 62005	NOTE: Harmonized as EN 62005 series.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC QC 001001	1998	Basic rules of the IEC Quality Assessment System for Electronic Components (IECQ)	-	-
IEC QC 001002-2	1998	Rules of Procedure of the IEC Quality Assessment System for Electronic Components (IECQ) Part 2: Documentation	-	-
IEC QC 001002-3	1998	Part 3: Approval procedures	-	-
IEC Guide 102	1996	Electronic components - Specification structures for quality assessment (Qualification approval and capability approval)	-	-
IEC 60027	Series	Letter symbols to be used in electrical technology	-	-
IEC 60050-731	1991	International Electrotechnical Vocabulary (IEV) Chapter 731: Optical fibre communication	-	-
IEC 60410	1973	Sampling plans and procedures for inspection by attributes	-	-
IEC 60617	Series	Graphical symbols for diagrams	EN 60617	Series
IEC 60695-2-2	1991	Fire hazard testing Part 2: Test methods -- Section 2: Needle-flame test	EN 60695-2-2	1994
IEC 60825-1	1993	Safety of laser products Part 1: Equipment classification, requirements and user's guide	EN 60825-1 + corr. February + A11	1994 1995 1996

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61300-1	1995	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures Part 1: General and guidance	EN 61300-1	1997
IEC 61300-2	Series	Part 2: Tests	EN 61300-2	Series
IEC 61300-3	Series	Part 3: Examinations and measurements	EN 61300-3	Series
IEC/TR3 61930	1998	Fibre optic graphical symbology	-	-
ISO 129	1985	Technical drawings - Dimensioning - General principles, definitions, methods of execution and special indications	-	-
ISO 286-1	1988	ISO system of limits and fits Part 1: Bases of tolerances, deviations and fit	-	-
ISO/FDIS 1101		Geometrical Product Specification (GPS) - Geometrical tolerancing - Generalities, definitions, symbols, indications on drawings	-	-
ISO 8601	1988	Data elements and interchange formats - Information interchange - Representation of dates and times	-	-

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**Circulateurs à fibres optiques –
Spécification générique**

**Fibre optic circulators –
Generic specification**

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIBRE OPTIC CIRCULATORS – GENERIC SPECIFICATION

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 co-operation 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 express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, 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.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62077 has been prepared by subcommittee 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:

FDIS	Report on voting
86B/1443/FDIS	86B/1499/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.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

The QC number that appears on the front cover of this publication is the specification number in the IEC Quality Assessment System for Electronic Components (IECQ).

The committee has decided that the contents of this publication will remain unchanged until 2008. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

INTRODUCTION

This standard, which is a generic specification, is divided into three clauses.

Clause 1 entitled "General" contains the scope, normative references and definitions which pertain to this generic specification.

Clause 2 entitled "Requirements" contains all the requirements which shall be met by circulators covered by this standard. The requirements for classification, the IEC specification system, documentation, materials, workmanship, quality, performance, identification, and packaging are described.

Clause 3 entitled "Quality assessment procedures" contains all of the procedures to be followed for proper quality assessment of products as covered by this standard.

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FIBRE OPTIC CIRCULATORS – GENERIC SPECIFICATION

1 General

1.1 Scope

This International Standard applies to circulators used in the field of fibre optics bearing all of the following features:

- they are non-reciprocal optical devices, in which each port is either an optical fibre or optical fibre connector;
- they are passive components containing no opto-electronic or other transducing elements;
- they have three or more ports for directionally transmitting optical power.

This standard establishes uniform requirements for the following:

- fibre optic circulator requirements;
- quality assessment procedures.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC QC 001001:1998, *IEC Quality Assessment System for Electronic Components (IECQ) – Basic rules*

IEC QC 001002-2:1998, *IEC Quality Assessment System for Electronic Components (IECQ) – Rules of Procedure – Part 2: Documentation*

IEC QC 001002-3:1998, *IEC Quality Assessment System for Electronic Components (IECQ) – Part 3: Approval procedures*

IEC Guide 102:1996, *Electronic components – Specification structures for quality assessment (Qualification approval and capability approval)*

IEC 60027 (all parts), *Letter symbols to be used in electrical technology*

IEC 60050(731):1991, *International Electrotechnical Vocabulary (IEV) – Chapter 731: Optical fibre communication*

IEC 60410:1973, *Sampling plans and procedures for inspection by attributes*

IEC 60617 (all parts), *Graphical symbols for diagrams*