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Fibre optic interconnecting devices and passive components - Fibre optic circulators - Generic specification

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/22

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EN IEC 62077

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2022

ICS 33.180.20

Supersedes EN 62077:2016

English Version

**Fibre optic interconnecting devices and passive components -
Fibre optic circulators - Generic specification
(IEC 62077:2022)**

Dispositifs d'interconnexion et composants passifs
fibroniques - Circulateurs fibroniques - Spécification
générique
(IEC 62077:2022)

Lichtwellenleiter - Verbindungselemente und passive
Bauteile - Lichtwellenleiterzirkulatoren -
Fachgrundspezifikation
(IEC 62077:2022)

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EN IEC 62077:2022 (E)**European foreword**

The text of document 86B/4624/FDIS, future edition 4 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 approved by CENELEC as EN IEC 62077:2022.

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60068 (series) NOTE Harmonized as EN 60068 (series)

IEC 60695-11-5 NOTE Harmonized as EN 60695-11-5

IEC 60793-2-50 NOTE Harmonized as EN IEC 60793-2-50

IEC 61753 (series) NOTE Harmonized as EN 61753 (series)

IEC 61753-091-02 NOTE Harmonized as EN IEC 61753-091-02

IEC 61754 (series) NOTE Harmonized as EN 61754 (series)

IEC 61754-4 NOTE Harmonized as EN IEC 61754-4

IEC 62005 (series) NOTE Harmonized as EN IEC 62005 (series)

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60027	series	Letter symbols to be used in electrical technology	EN 60027	series
IEC 60050-731	-	International Electrotechnical Vocabulary - Chapter 731: Optical fibre communication	-	-
IEC 60617	-	Graphical symbols for diagrams	-	-
IEC 60825	series	Safety of laser products	EN 60825	series
IEC 61300	series	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures	EN IEC 61300	series
IEC/TR 61930	-	Fibre optic graphical symbology	-	-
IEC/TS 62627-09	-	Fibre optic interconnecting devices and passive components - Vocabulary for passive optical devices	-	-
ISO 129-1	-	Technical product documentation (TPD) – Presentation of dimensions and tolerances - Part 1: General principles	EN ISO 129-1	-
ISO 286-1	-	Geometrical product specifications (GPS) - ISO code system for tolerances on linear sizes - Part 1: Basis of tolerances, deviations and fits	EN ISO 286-1	-
ISO 1101	-	Geometrical product specifications (GPS) - Geometrical tolerancing - Tolerances of form, orientation, location and run-out	EN ISO 1101	-
ISO 8601-1	-	Date and time - Representations for information interchange - Part 1: Basic rules	-	-



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Edition 4.0 2022-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Fibre optic interconnecting devices and passive components – Fibre optic circulators – Generic specification

Dispositifs d'interconnexion et composants passifs fibroniques – Circulateurs fibroniques – Spécification générique





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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Fibre optic interconnecting devices and passive components – Fibre optic circulators – Generic specification

Dispositifs d'interconnexion et composants passifs fibroniques – Circulateurs fibroniques – Spécification générique

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING
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FIBRE OPTIC CIRCULATORS – GENERIC SPECIFICATION****FOREWORD**

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IEC 62077 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2015. This edition constitutes a technical revision.

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

- a) harmonization of terms and definitions with IEC TS 62627-09;
- b) change of Clause 4 regarding requirements.

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

Draft	Report on voting
86B/4624/FDIS	86B/4645/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/standardsdev/publications.

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FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – FIBRE OPTIC CIRCULATORS – GENERIC SPECIFICATION

1 Scope

This document 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 fibre optic connector;
- they are passive devices in accordance with the categorization and definition provided in IEC TS 62538;
- they have three or more ports for directionally transmitting optical power.

An example of optical circulator technology and application is described in Annex A and Annex B, respectively.

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.

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IEC 60617, *Graphical symbols for diagrams*, available at <http://std.iec.ch/iec60617>

IEC 60825 (all parts), *Safety of laser products*

IEC 61300 (all parts), *Fibre optic interconnecting devices and passive components – Basic tests and measurement procedures*

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