

SLOVENSKI STANDARD SIST EN IEC 61753-091-02:2022

01-junij-2022

Nadomešča:

SIST EN 61753-091-2:2013

Optični spojni elementi in pasivne komponente - Izvedbeni standard - 091-02. del: 3-portni optični nepopolno zaokroženi enorodovni cirkulatorji brez konektorjev za kategorijo C - Nadzorovana okolja (IEC 61753-091-02:2022)

Fibre optic interconnecting devices and passive components - Performance standard - Part 091-02: Non-connectorized 3-port incompletely circulated single-mode fibre optic circulators for category C - Controlled environments (IEC 61753-091-02:2022)

PREVIEW

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Betriebsverhalten - Teil 091-02: Nicht mit Steckverbindern versehene unvollständig umlaufende Einmoden-Lichtwellenleiter-Zirkulatoren mit 3 Anschlüssen für die Kategorie C - Kontrollierte Umgebung (IEC 61753-091-02:2022)

https://standards.iteh.ai/catalog/standards/sist/460a26fb-

Dispositifs d'interconnexion et composants passifs fibroniques - Norme de performance - Partie 091-02: Circulateurs fibroniques à circulation partielle à 3 ports, non connectorisés et équipés de fibres optiques unimodales, pour la catégorie C - Environnements contrôlés (IEC 61753-091-02:2022)

Ta slovenski standard je istoveten z: EN IEC 61753-091-02:2022

ICS:

33.180.20 Povezovalne naprave za

optična vlakna

Fibre optic interconnecting

devices

SIST EN IEC 61753-091-02:2022 en

SIST EN IEC 61753-091-02:2022

iTeh STANDARD **PREVIEW** (standards.iteh.ai)

SIST EN IEC 61753-091-02:2022 https://standards.iteh.ai/catalog/standards/sist/460a26fb-2dfd-4aa7-8221-ce97c0c31fe5/sist-en-iec-61753-091-02-2022

EUROPEAN STANDARD

EN IEC 61753-091-02

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2022

ICS 33.180.20

Supersedes EN 61753-091-2:2013 and all of its amendments and corrigenda (if any)

English Version

Fibre optic interconnecting devices and passive components Performance standard - Part 091-02: Non-connectorized 3-port
incompletely circulated single-mode fibre optic circulators for
category C - Controlled environments
(IEC 61753-091-02:2022)

Dispositifs d'interconnexion et composants passifs fibroniques - Norme de performance - Partie 091-02: Circulateurs fibroniques à circulation partielle à 3 ports, non connectorisés et équipés de fibres optiques unimodales, pour la catégorie C - Environnements contrôlés (IEC 61753-091-02:2022)

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Betriebsverhalten - Teil 091-02: Nicht mit Steckverbindern versehene unvollständig umlaufende Einmoden-Lichtwellenleiter-Zirkulatoren mit 3 Anschlüssen für die Kategorie C - Kontrollierte Umgebung (IEC 61753-091-02:2022)

PREVIEW

This European Standard was approved by CENELEC on 2022-03-23. 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 CEN-CENELEC Management Centre or to any CENELEC member.

SIST EN IEC 61753-091-02:2022

This European Standard exists in three official versions (English, French, German). A version of any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

02-2022

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

European foreword

The text of document 86B/4555/FDIS, future edition 1 of IEC 61753-091-02, 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 61753-091-02:2022.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-12-23 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2023-03-23 document have to be withdrawn

This document supersedes EN 61753-091-2:2013 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.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.



The text of the International Standard NEC-61753-091002:2022 (Was approved by CENELEC as a European Standard without any modificational/catalog/standards/sist/460a26fb-

2dfd-4aa7-8221-ce97c0c31fe5/sist-en-iec-61753-091-

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

IEC 61300 (series) NOTE Harmonized as EN 61300 (series)

IEC 61753-091-2:2012 NOTE Harmonized as EN 61753-091-2:2013 (not modified)

IEC 61977 NOTE Harmonized as EN IEC 61977

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

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>	EN/HD	<u>Year</u>
IEC 60793-2-50	-	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN IEC 60793-2-5	0 -
IEC 60794-2-50	-	Optical fibre cables - Part 2-50: Indoor optical fibre cables - Family specification for simplex and duplex cables for use in terminated cable assemblies	EN IEC 60794-2-5	0 -
IEC 61300-2-1	- https://	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-1: Tests /staVibration (sinusoidal) og/standards/sist/4		-
IEC 61300-2-4	_ 2dfd-	4 Fibre optic interconnecting devices and 17 passive components 2 Basic test and measurement procedures - Part 2-4: Tests - Fibre or cable retention		-
IEC 61300-2-5	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-5: Tests - Torsion	EN 61300-2-5	-
IEC 61300-2-9	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-9: Tests - Shock	EN 61300-2-9	-
IEC 61300-2-14	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-14: Tests - High optical power	EN IEC 61300-2-1	4 -
IEC 61300-2-17	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-17: Tests - Cold	EN 61300-2-17	-

IEC 61300-2-18	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-18: Tests - Dry heat	EN 61300-2-18	-
IEC 61300-2-19	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-19: Tests - Damp heat (steady state)	EN 61300-2-19	-
IEC 61300-2-22	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-22: Tests - Change of temperature	-	-
IEC 61300-2-42	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-42: Tests - Static side load for strain relief	EN 61300-2-42	-
IEC 61300-2-44	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-44: Tests - Flexing of the strain relief of fibre optic devices	EN 61300-2-44	-
IEC 61300-3-2	-	Fibre optic interconnecting devices and passive components. Basic test and measurement procedures - Part 3-2: Examination and measurements - Polarization dependent loss in a single-mode fibre optic device.	EN 61300-3-2	-
IEC 61300-3-3	https:// 2dfd-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures () Part 3-3:022 Examinations and measurements - Active monitoring of changes in attenuation and 7 return loss	EN 61300-3-3 60a26fb- 53-091-	-
IEC 61300-3-7	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-7: Examinations and measurements - Wavelength dependence of attenuation and return loss of single mode components	EN IEC 61300-3-7	-
IEC 61300-3-20	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-20: Examinations and measurements - Directivity of fibre optic branching devices	EN 61300-3-20	-
IEC 61300-3-28	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-28: Examinations and measurements - Transient loss	EN 61300-3-28	-

IEC 61300-3-32	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-32: Examinations and measurements - Polarization mode dispersion measurement for passive optical components	EN 61300-3-32	-
IEC 61753-1	2018	Fibre optic interconnecting devices and passive components - Performance standard - Part 1: General and guidance	EN IEC 61753-1	2018
+ A1	2020		+ A1	2020
IEC 62077	-	Fibre optic interconnecting devices and passive components - Fibre optic circulators - Generic specification	EN 62077	-
IEC/TS 62627-09	-	Fibre optic interconnecting devices and passive components - Vocabulary for passive optical devices	-	-

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN IEC 61753-091-02:2022 https://standards.iteh.ai/catalog/standards/sist/460a26fb-2dfd-4aa7-8221-ce97c0c31fe5/sist-en-iec-61753-091-

02-2022

SIST EN IEC 61753-091-02:2022

iTeh STANDARD **PREVIEW** (standards.iteh.ai)

SIST EN IEC 61753-091-02:2022 https://standards.iteh.ai/catalog/standards/sist/460a26fb-2dfd-4aa7-8221-ce97c0c31fe5/sist-en-iec-61753-091-02-2022



IEC 61753-091-02

Edition 1.0 2022-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

iTeh STANDARD

Fibre optic interconnecting devices and passive components – Performance standard –

Part 091-02: Non-connectorized 3-port incompletely circulated single-mode fibre optic circulators for category C – Controlled environments

Dispositifs d'interconnexion et composants passifs fibroniques – Norme de performance – 2dfd-4aa7-8221-ce97c0c31fe5/sist-en-iec-61753-091-

performance – 2dfd-4aa7-8221-ce97c0c31fe5/sist-en-iec-61753-091-Partie 091-02: Circulateurs fibroniques à circulation partielle à 3 ports, non connectorisés et équipés de fibres optiques unimodales, pour la catégorie C – Environnements contrôlés

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 33.180.20 ISBN 978-2-8322-1069-1

Warning! Make sure that you obtained this publication from an authorized distributor.

Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.

-2-IEC 61753-091-02:2022 © IEC 2022

CONTENTS

FOR	EWORD	.3
1	Scope	.5
2	Normative references	.5
3	Terms and definitions	6
4	Test conditions	7
5	Test report	7
6	Reference components	7
7	Performance requirements	. 7
7	.1 Dimensions	7
7	.2 Sample size	7
7.3 Test details and requirements		8
Ann	ex A (normative) Sample size1	3
Bibli	ography1	4
Tabl	e 1 – Single-mode spectral bands	.7
Tabl	e 2 – Test details and requirements (1 of 5)	.8
Tabl	able A 1 - Sample size	
	PREVIEW	•
	(standards.iteh.ai)	

SIST EN IEC 61753-091-02:2022 https://standards.iteh.ai/catalog/standards/sist/460a26fb-2dfd-4aa7-8221-ce97c0c31fe5/sist-en-iec-61753-091-02-2022

IEC 61753-091-02:2022 © IEC 2022

– 3 –

INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – PERFORMANCE STANDARD –

Part 091-02: Non-connectorized 3-port incompletely circulated single-mode fibre optic circulators for category C – Controlled environments

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. 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 EC 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 IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity independent certification bodies provide conformity assessment services and in some areas access to IEC marks of conformity IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 61753-091-02 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 first edition cancels and replaces IEC 61753-091-2 published in 2012. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 61753-091-2:

- a) change of title adding the 3-port incompletely circulated type;
- b) harmonization of terms and definitions with those in IEC 61977 and IEC TS 62627-09;
- c) harmonization of test items and their conditions with IEC 61753-1:2018 and IEC 61753-1:2018/AMD1:2020.