

SLOVENSKI STANDARD
SIST EN IEC 61753-053-02:2022**01-november-2022****Nadomešča:****SIST EN 61753-053-2:2014**

Optični spojni elementi in pasivne komponente - Izvedbeni standard - 053-02. del: Električno krmiljeni spremenljivi optični slabilnik brez konektorjev za enorodovna vlakna za kategorijo C - Nadzorovana okolja (IEC 61753-053-02:2022)

Fibre optic interconnecting devices and passive components - Performance standard - Part 053-02: Non-connectorized single-mode fibre, electrically controlled, variable optical attenuator for category C - Controlled environments (IEC 61753-053-02:2022)

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Betriebsverhalten - Teil 053-2: Nicht mit Steckverbindern versehene, elektrisch kontrolliert änderbare optische Dämpfungsglieder für Einmodenfasern für die Kategorie C - Kontrollierte Umgebung (IEC 61753-053-02:2022)

Dispositifs d'interconnexion et composants passifs à fibres optiques - Norme de performance - Partie 053-02: Affaiblisseur optique variable commandé électriquement, à fibres unimodales, non connectorisé, pour la catégorie C - Environnements contrôlés (IEC 61753-053-02:2022)

Ta slovenski standard je istoveten z: EN IEC 61753-053-02:2022

ICS:

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|-----------|---------------------------------------|-------------------------------------|
| 33.180.20 | Povezovalne naprave za optična vlakna | Fibre optic interconnecting devices |
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SIST EN IEC 61753-053-02:2022 en

EUROPEAN STANDARD

EN IEC 61753-053-02

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2022

ICS 33.180.20

Supersedes EN 61753-053-2:2014

English Version

Fibre optic interconnecting devices and passive components -
Performance standard - Part 053-02: Non-connectorized, single-
mode fibre, electrically controlled, variable optical attenuator for
category C - Controlled environments
(IEC 61753-053-02:2022)

Dispositifs d'interconnexion et composants passifs
fibroniques - Norme de performance - Partie 053-02:
Affaiblisseur optique variable commandé électriquement, à
fibres unimodales, non connectorisé, pour la catégorie C -
Environnements contrôlés
(IEC 61753-053-02:2022)

Lichtwellenleiter - Verbindungselemente und passive
Bauteile - Betriebsverhalten - Teil 053-2: Nicht mit
Steckverbindern versehene, elektrisch kontrolliert
änderbare optische Dämpfungsglieder für Einmodenfasern
für die Kategorie C - Kontrollierte Umgebung
(IEC 61753-053-02:2022)

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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

EN IEC 61753-053-02:2022 (E)**European foreword**

The text of document 86B/4622/FDIS, future edition 1 of IEC 61753-053-02, 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 61753-053-02:2022.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2023-05-31 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2023-08-31 document have to be withdrawn

This document supersedes EN 61753-053-2:2014 and all of its amendments and corrigenda (if any).

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Endorsement notice

The text of the International Standard IEC 61753-053-02:2022 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 62343-1 NOTE Harmonized as EN IEC 62343-1

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> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|---|-------------------|-------------|
| IEC 60793-2-50 | - | Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres | EN IEC 60793-2-50 | - |
| 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 60794-2-50 | - |
| IEC 60869-1 | - | Fibre optic interconnecting devices and passive components - Fibre optic passive power control devices - Part 1: Generic specification | EN IEC 60869-1 | - |
| IEC 61300 | series | Fibre optic interconnecting devices and passive components - Basic test and measurement procedures | EN IEC 61300 | series |
| IEC 61300-2-1 | - | Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-1: Tests - Vibration (sinusoidal) | EN 61300-2-1 | - |
| IEC 61300-2-4 | - | Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-4: Tests - Fibre or cable retention | EN IEC 61300-2-4 | - |
| 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 61300-2-14 | - |

EN IEC 61753-053-02:2022 (E)

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|----------------|---|--|-------------------|---|
| 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 - High temperature endurance | 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 | EN 61300-2-22 | - |
| 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: Examinations and measurements - Polarization dependence of a single-mode fibre optic device | EN 61300-3-2 | - |
| IEC 61300-3-3 | - | Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-3: Examinations and measurements - Active monitoring of changes in attenuation and return loss | EN 61300-3-3 | - |
| 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 61300-3-14 | - | Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-14: Examinations and measurements - Error and repeatability of the attenuation settings of a variable optical attenuator | EN 61300-3-14 | - |
| IEC 61300-3-21 | - | Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-21: Examinations and measurements - Switching time | EN IEC 61300-3-21 | - |

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|-----------------|------|--|----------------|------|
| 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 61753-1 | 2018 | Fibre optic interconnecting devices and passive components - Performance standard - Part 1: General and guidance | EN IEC 61753-1 | 2018 |
| IEC/TS 62627-09 | - | Fibre optic interconnecting devices and passive components - Vocabulary for passive optical devices | - | - |

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Edition 1.0 2022-07

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NORME INTERNATIONALE

Fibre optic interconnecting devices and passive components – Performance standard –

Part 053-02: Non-connectorized, single-mode fibre, electrically controlled, variable optical attenuator for category C – Controlled environments

[SIST EN IEC 61753-053-02:2022](#)

Dispositifs d'interconnexion et composants passifs fibroniques – Norme de performance –

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING DEVICES AND
PASSIVE COMPONENTS – PERFORMANCE STANDARD –****Part 053-02: Non-connectorized, single-mode fibre, electrically controlled,
variable optical attenuator for category C – Controlled environments**

FOREWORD

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IEC 61753-053-02 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 61753-053-2 published in 2014. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 61753-053-2:2014:

- a) harmonization of terms and definitions with those in IEC 60869-1 and IEC TS 62627-09;
- b) harmonization of test items and their conditions with IEC 61753-1:2018 and IEC 61753-1:2018/AMD1:2020.