SLOVENSKI STANDARD
SIST EN IEC 60512-23-3:2019

01-maj-2019

Nadomešča:
SIST EN 60512-23-3:2002

Konektorji za električno in elektronsko opremo - Preskusi in meritve - 23-3. del: Preskusi zaslanjanja in filtriranja - Preskus 23c: Oklepna učinkovitost konektorjev in pribora - Metoda injekcijskih linij (IEC 60512-23-3:2018)

Connectors for electrical and electronic equipment - Tests and measurements - Part 23-3: Screening and filtering tests - Test 23c: Shielding effectiveness of connectors and accessories - Line injection method (IEC 60512-23-3:2018)

Elektrisch-mechanische Bauelemente für elektrische und elektronische Einrichtungen - Meß- und Prüfverfahren - Teil 23-3: Prüfung 23c: Schirmwirkung von Steckverbindern und Zubehör - Paralleldrahtverfahren (IEC 60512-23-3:2018)

Connecteurs pour équipements électriques et électroniques - Essais et mesures - Partie 23-3: Essais d'écrantage et de filtrage - Essai 23c: Efficacité de blindage des connecteurs et des accessoires - Méthode de la ligne d'injection (IEC 60512-23-3:2018)

Ta slovenski standard je istoveten z: **EN IEC 60512-23-3:2019**

ICS:

31.220.10	Vtiči in vtičnice, konektorji	Plug-and-socket devices. Connectors

SIST EN IEC 60512-23-3:2019 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60512-23-3

March 2019

ICS 31.220.01

Supersedes EN 60512-23-3:2001

English Version

Connectors for electrical and electronic equipment - Tests and measurements - Part 23-3: Screening and filtering tests - Test 23c: Shielding effectiveness of connectors and accessories - Line injection method (IEC 60512-23-3:2018)

Composants électromécaniques pour équipements électroniques - Procédures d'essai de base et méthodes de mesure - Partie 23-3: Essai 23c: Efficacité de blindage des connecteurs et des accessoires
(IEC 60512-23-3:2018)

Elektrisch-mechanische Bauelemente für elektrische und elektronische Einrichtungen - Meß- und Prüfverfahren - Teil 23-3: Prüfung 23c: Schirmwirkung von Steckverbindern und Zubehör - Paralleldrahtverfahren
(IEC 60512-23-3:2018)

This European Standard was approved by CENELEC on 2019-01-18. 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.

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 CEN-CENELEC Management Centre has the same status as the official versions.

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

CENELEC

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

Ref. No. EN IEC 60512-23-3:2019 E

European foreword

The text of document 48B/2631/CDV, future edition 2 of IEC 60512-23-3, prepared by SC 48B "Electrical connectors" of IEC/TC 48 "Electrical connectors and mechanical structures for electrical and electronic equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60512-23-3:2019.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2019-10-18
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2022-01-18

This document supersedes EN 60512-23-3:2001.

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.

Endorsement notice

The text of the International Standard IEC 60512-23-3:2018 was approved by CENELEC as a European Standard without any modification.

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.

Publication	Year	Title	EN/HD	Year
IEC 60050-581	-	International Electrotechnical Vocabulary - Part 581: Electromechanical components for electronic equipment	-	-
IEC 60512-1	-	Connectors for electrical and electronic equipment - Tests and measurements - Part 1: Generic specification	EN IEC 60512-1	-
IEC 62153-4-6	2017	Metallic cables and other passive components test methods - Part 4-6: Electromagnetic compatibility (EMC) - Surface transfer impedance - line injection method	-	-

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Connectors for electrical and electronic equipment – Tests and measurements – Part 23-3: Screening and filtering tests – Test 23c: Shielding effectiveness of connectors and accessories – Line injection method

Connecteurs pour équipements électriques et électroniques – Essais et mesures – Partie 23-3: Essais d'écrantage et de filtrage – Essai 23c: Efficacité de blindage des connecteurs et des accessoires – Méthode de la ligne d'injection

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CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT – TESTS AND MEASUREMENTS –

Part 23-3: Screening and filtering tests – Test 23c: Shielding effectiveness of connectors and accessories – Line injection method

FOREWORD

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International Standard IEC 60512-23-3 has been prepared by subcommittee 48B: Electrical connectors, of IEC technical committee 48: Electrical connectors and mechanical structures for electrical and electronic equipment.

This second edition cancels and replaces the first edition, published in 2000. This edition constitutes a technical revision.

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

a) an introduction has been added to provide some guidance to this document in view of concurrent test method 23g in the same family;

b) the frequency range for which this test method is considered reliable moved from 1 GHz to 3 GHz, to be consistent with Figure 7 (unchanged) and current industry practice and need;
c) update to IEC 62153-4-6:2017 of former normative reference IEC 60096-4-1:1990, withdrawn and incorrect (should have been IEC 61196-1:1995, also withdrawn);
d) update to current subclause numbers of IEC 62153-4-6:2017 what were the previous subclause numbers referenced in IEC 61196-1:1995 (wrongly attributed to IEC 60096-4-1:1990). For immediate understanding the title of these subclauses has been added;
e) alignment of title to the current scope of SC 48B (connectors) and inclusion of electrical equipment as target application of said connectors (per current scope of TC 48) and explicit reference to the method – line injection – for the measurement of transfer impedance;
f) symbols SE for shielding effectiveness and Z_T for surface transfer impedance added throughout the document;
g) list of connectors to which the test method is applicable – previously in 3.1 – moved in scope;
h) former name of AECMA organization changed to the current ASD-STAN;
i) “specimen” used instead of “sample” throughout the document;
j) clarification in the title of what transfer impedance is described in Table 3 and editorial improvement of the same;
k) “dielectric constant” changed into the updated term “relative permittivity”;
l) added a note to warn about the fact that this test method requires in 6.6 a TDR with more stringent rise time of less than 100 ps than the value of less than 350 ps specified both in IEC 62153-4-6 and in EN 50289-1-6 for the similar line injection method applied to screened cables, whereas test 23g of IEC 60512-23-7 specifies for the same purpose a TDR with a rise time of less than 200 ps;
m) adoption of term “*connector housing*” [IEV 581-27-10] instead of “*shell*” to address the connector accessory providing the shielding;
n) title “Transfer impedance Z_T [Ω]” added to the ordinate axis on the left side of double log diagram of Figure 7;
o) explanatory note to clarify the conversion formula for SE from Z_T added.

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

FDIS	Report on voting
48B/2631/CDV	48B/2670/RVC

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

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

A list of all parts in the IEC 60512 series, published under the general title *Connectors for electrical and electronic equipment – Tests and measurements*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

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