SLOVENSKI STANDARD
SIST EN 61326-3-1:2017

01-december-2017

Nadomešča:
SIST EN 61326-3-1:2008

Električna oprema za merjenje, nadzor in laboratorijsko uporabo - Zahteve elektromagnetne združljivosti (EMC) - 3-1. del: Zahteve za odpornost sistemov, povezanih z varnostjo, in opreme, namenjene za opravljanje funkcij, povezanih z varnostjo (funkcijska varnost) - Splošna industrijska uporaba (IEC 61326-3-1:2017)

Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 3-1: Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) - General industrial applications (IEC 61326-3-1:2017)

Elektrische Mess-, Steuer-, Regel- und Laborgeräte - EMV-Anforderungen - Teil 3-1: Störfestigkeitsanforderungen für sicherheitsbezogene Systeme und für Geräte, die für sicherheitsbezogene Funktionen vorgesehen sind (Funktionale Sicherheit) - Allgemeine industrielle Anwendungen (IEC 61326-3-1:2017)

Matériel électrique de mesure, de commande et de laboratoire - Exigences relatives à la CEM - Partie 3-1: Exigences d'immunité pour les systèmes relatifs à la sécurité et pour les matériels destinés à réaliser des fonctions relatives à la sécurité (sécurité fonctionnelle) - Applications industrielles générales (IEC 61326-3-1:2017)

Ta slovenski standard je istoveten z: **EN 61326-3-1:2017**

ICS:

25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control
33.100.20	Imunost	Immunity

SIST EN 61326-3-1:2017 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61326-3-1

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Supersedes EN 61326-3-1:2008

English Version

Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 3-1: Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) - General industrial applications (IEC 61326-3-1:2017)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of document 65A/819/FDIS, future edition 2 of IEC 61326-3-1, prepared by SC 65A "System aspects", of IEC/TC 65 "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61326-3-1:2017.

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) 2018-03-20
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-06-20

This document supersedes EN 61326-3-1:2008.

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 61326-3-1:2017 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:

IEC 60204-1:2005	NOTE	Harmonized as EN 60204-1:2006.
IEC 61000 (series)	NOTE	Harmonized as EN 61000 (series).
IEC 61000-1-2:2005	NOTE	Harmonized as EN 60204-1:2006.
IEC 61000-6-5	NOTE	Harmonized as EN 61000-6-5.
IEC 61000-6-7	NOTE	Harmonized as EN 61000-6-7.
IEC 61326-2-1:2012	NOTE	Harmonized as EN 61326-2-1:2013.
IEC 61326-2-2:2012	NOTE	Harmonized as EN 61326-2-2:2013.
IEC 61326-2-3:2012	NOTE	Harmonized as EN 61326-2-3:2013.
IEC 61326-2-4:2012	NOTE	Harmonized as EN 61326-2-4:2013.
IEC 61326-2-5:2012	NOTE	Harmonized as EN 61326-2-5:2013.
IEC 61326-3-1:2008	NOTE	Harmonized as EN 61326-3-1:2008.
IEC 61508 (series)	NOTE	Harmonized as EN 61508 (series).

IEC 61508-1:2010	NOTE	Harmonized as EN 61508-1:2010.
IEC 61508-4:2010	NOTE	Harmonized as EN 61508-4:2010.
IEC 61511 (series)	NOTE	Harmonized as EN 61511 (series).
IEC 61784-3	NOTE	Harmonized as EN 61784-3.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When 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 60050-161	-	International Electrotechnical Vocabulary- (IEV) -- Chapter 161: Electromagnetic compatibility		-
IEC 61000-4-2	2008	Electromagnetic compatibility (EMC) -- Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	2009
IEC 61000-4-3	2006	Electromagnetic compatibility (EMC) -- Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	2006
+ A1	2007		+ A1	2008
+ A2	2010		+ A2	2010
IEC 61000-4-4	2012	Electromagnetic compatibility (EMC) -- Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	2012
IEC 61000-4-5	2014	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	2014
IEC 61000-4-6	2013	Electromagnetic compatibility (EMC) -- Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6	2014
IEC 61000-4-8	2009	Electromagnetic compatibility (EMC) -- Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	EN 61000-4-8	2010
IEC 61000-4-11	2004	Electromagnetic compatibility (EMC) -- Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	EN 61000-4-11	2004
IEC 61000-4-16	2015	Electromagnetic compatibility (EMC) - Part 4-16: Testing and measurement techniques - Test for immunity to conducted, common mode disturbances in the frequency range 0 Hz to 150 kHz	EN 61000-4-16	2016

IEC 61000-4-29	2000	Electromagnetic compatibility (EMC) -- Part 4-29: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations on d.c. input power port immunity tests	EN 61000-4-29	2000
IEC 61000-4-34	2005	Electromagnetic compatibility (EMC) -- Part 4-34: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current more than 16 A per phase	EN 61000-4-34	2007
+ A1	2009		+ A1	2009
IEC 61000-6-2	2016	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity standard for industrial environments	EN 61000-6-2	2017
IEC 61326-1	2012	Electrical equipment for measurement, control and laboratory use - EMC requirements -- Part 1: General requirements	EN 61326-1	2013
IEC 61326-3-2	-		-	-
IEC 61508-2	2010	Functional safety of electrical/electronic/programmable electronic safety-related systems -- Part 2: Requirements for electrical/electronic/programmable electronic safety-related systems	EN 61508-2	2010

IEC 61326-3-1

Edition 2.0 2017-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Electrical equipment for measurement, control and laboratory use – EMC requirements –
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL AND LABORATORY USE – EMC REQUIREMENTS –

Part 3-1: Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) – General industrial applications

FOREWORD

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International Standard IEC 61326-3-1 has been prepared by subcommittee 65A: System aspects, of IEC technical committee 65: Industrial-process measurement, control and automation.

This second edition cancels and replaces the first edition published in 2008. This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition:

- extension of the frequency range up to 6 GHz for the radio-frequency electromagnetic field test according to IEC 61000-4-3,
- replacement of the performance criterion FS with DS according to the generic standard IEC 61000-6-7,
- adding Table 1 – Aspects to be considered during application of performance criterion DS,

- including immunity tests for devices with current consumption > 16 A according to IEC 61000-4-34,
- updating Table 8 – Frequency ranges of mobile transmitters and ISM equipment,
- updating Figure A.1 and Figure 1 for better readability.

IEC 61326-3-1 is to be read in conjunction with IEC 61326-1.

The text of this standard is based on the following documents:

FDIS	Report on voting
65A/819/FDIS	65A/825/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 2.

A list of all the parts of the IEC 61326 series, under the general title *Electrical equipment for measurement, control and laboratory use – EMC requirements*, can be found on the IEC website.

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

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

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