



# SLOVENSKI STANDARD

## SIST EN 61003-2:2017

01-marec-2017

Nadomešča:  
SIST EN 61003-2:2010

---

**Nadzorni sistemi za industrijske procese - Instrumenti z analognimi vhodi in dvo- ali večpozicijskimi izhodi - 2. del: Vodilo za pregled in serijske preskuse (IEC 61003-2:2016)**

Industrial-Process control systems - Instruments with analogue inputs and two- or multi-position outputs - Part 2: Guidance for inspection and routine testing (IEC 61003-2:2016)

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

Systeme der industriellen Prozessleittechnik - Geräte mit analogen Eingängen und Zwei- oder Mehrpunktverhalten - Teil 2: Leitfaden für Funktionskontrolle und Serienprüfung (IEC 61003-2:2016)

<https://standards.iteh.ai/catalog/standards/sist/1d176997-35d7-494b-b62c-4452c99727cb/sist-en-61003-2-2017>

Système de commande de processus industriels - Instruments avec entrées analogiques et sorties à deux ou plusieurs positions - Partie 2: Guide pour les inspections et les essais individuels de série (IEC 61003-2:2016)

**Ta slovenski standard je istoveten z: EN 61003-2:2016**

---

**ICS:**

25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control
-----------	--	--

**SIST EN 61003-2:2017**

**en,fr,de**

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

SIST EN 61003-2:2017

<https://standards.iteh.ai/catalog/standards/sist/1d176997-35d7-494b-b62c-4452c99727cb/sist-en-61003-2-2017>

EUROPEAN STANDARD

EN 61003-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2016

ICS 25.040.40

Supersedes EN 61003-2:2009

English Version

Industrial-process control systems - Instruments with analogue inputs and two- or multi-position outputs - Part 2: Guidance for inspection and routine testing  
(IEC 61003-2:2016)

Systèmes de commande de processus industriels - Instruments avec entrées analogiques et sorties à deux ou plusieurs positions - Partie 2: Conseils pour les inspections et les essais individuels de série  
(IEC 61003-2:2016)

Systeme der industriellen Prozessleittechnik - Geräte mit analogen Eingängen und Zwei- oder Mehrpunktverhalten - Teil 2: Leitfaden für Funktionskontrolle und Serienprüfung  
(IEC 61003-2:2016)

This European Standard was approved by CENELEC on 2016-07-19. 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, 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: Avenue Marnix 17, B-1000 Brussels

**EN 61003-2:2016****European foreword**

The text of document 65B/1039/FDIS, future edition 2 of IEC 61003-2, prepared by SC 65B "Measurement and control devices", of IEC/TC 65 "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61003-2:2016.

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) 2017-05-04
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-11-04

This document supersedes EN 61003-2:2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

**(standards.iteh.ai)**

**Endorsement notice**

<https://standards.iteh.ai/catalog/standards/sist/1d176997-35d7-494b-b62c-4452c99727cb/sist-en-61003-2-2017>

The text of the International Standard IEC 61003-2:2016 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, 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61003-1	2016	Industrial-process control systems - Instruments with analogue inputs and two- or multi-position outputs - Part 1: Methods for evaluating performance	EN 61003-1	2016
IEC 61298	series	Process measurement and control devices - General methods and procedures for evaluating performance	EN 61298	series
IEC 61298-2	2008	Process measurement and control devices - General methods and procedures for evaluating performance - Part 2: Tests under reference conditions	EN 61298-2	2008
IEC 61298-3	2008	Process measurement and control devices - General methods and procedures for evaluating performance - Part 3: Tests for the effects of influence quantities	EN 61298-3	2008
IEC 61298-4	-	Process measurement and control devices - General methods and procedures for evaluating performance - Part 4: Evaluation report content	EN 61298-4	-

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

SIST EN 61003-2:2017

<https://standards.iteh.ai/catalog/standards/sist/1d176997-35d7-494b-b62c-4452c99727cb/sist-en-61003-2-2017>



IEC 61003-2

Edition 2.0 2016-06

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

**Industrial-process control systems – Instruments with analogue inputs and two or multi-position outputs –  
Part 2: Guidance for inspection and routine testing**

**Systèmes de commande de processus industriels – Instruments avec entrées analogiques et sorties à deux ou plusieurs positions –  
Partie 2: Conseils pour les inspections et les essais individuels de série**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

ICS 25.040.40

ISBN 978-2-8322-3389-4

**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.**

## CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions .....	5
4 Sampling for test .....	6
5 Performance tests .....	6
5.1 General.....	6
5.2 Test conditions.....	6
5.2.1 Ambient conditions.....	6
5.2.2 Supply conditions.....	7
5.3 Tests under reference conditions.....	7
5.3.1 General .....	7
5.3.2 Set point.....	7
5.4 Tests for the effects of influence quantities .....	7
5.4.1 General .....	7
5.4.2 Supply voltage variations .....	8
5.4.3 Supply pressure variations .....	8
6 Test report and documentation.....	8
6.1 General.....	8
6.2 Test report and general observations.....	8
<u>SIST EN 61003-2:2017</u>	
Table 1 – Test items <a href="https://standards.iteh.ai/catalog/standards/sist/1d176997-35d7-494b-b62c-4452c99727cb/sist-en-61003-2-2017">https://standards.iteh.ai/catalog/standards/sist/1d176997-35d7-494b-b62c-4452c99727cb/sist-en-61003-2-2017</a> .....	6
Table 2 – Test report and general observations .....	9



## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**INDUSTRIAL-PROCESS CONTROL SYSTEMS –  
INSTRUMENTS WITH ANALOGUE INPUTS AND  
TWO OR MULTI-POSITION OUTPUTS –****Part 2: Guidance for inspection and routine testing**

## 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 IEC 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.

International Standard IEC 61003-2 has been prepared by subcommittee 65B: Measurement and control devices, of IEC technical committee TC 65: Industrial-process measurement, control and automation.

This second edition cancels and replaces the first edition published in 2009. This edition constitutes a technical revision.

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

- a) use of the term "two- or multi-position output" instead of "two- or multi-state instrument" (see Scope);
- b) use of the term "differential gap" instead of "switching differential" (see Table 1 No 2);
- c) use of the term "dielectric strength" instead of "isolation test" (see Table 1 No 5).