



SLOVENSKI STANDARD
oSIST prEN IEC 61298-1:2024
01-november-2024

Naprave za merjenje in nadzor procesa - Splošne metode in postopki za ocenjevanje lastnosti - 1. del: Splošna načela pristopov

Process measurement and control devices - General methods and procedures for evaluating performance - Part 1: General considerations

Prozessmess-, -steuer- und -regelgeräte - Allgemeine Methoden und Verfahren für die Bewertung des Betriebsverhaltens - Teil 1: Allgemeine Betrachtungen

Dispositifs de mesure et de commande de processus - Méthodes et procédures générales d'évaluation des performances - Partie 1: Généralités

Ta slovenski standard je istoveten z: prEN IEC 61298-1:2024

[oSIST prEN IEC 61298-1:2024](https://standards.sist.net/catalog/standards/sist/62988730-2024-1176c-7ec03803d97a/osist-pr-en-iec-61298-1-2024)

<https://standards.sist.net/catalog/standards/sist/62988730-2024-1176c-7ec03803d97a/osist-pr-en-iec-61298-1-2024>

ICS:

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

oSIST prEN IEC 61298-1:2024

en,fr,de



65B/1269/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: IEC 61298-1 ED3	
DATE OF CIRCULATION: 2024-09-06	CLOSING DATE FOR VOTING: 2024-11-29
SUPERSEDES DOCUMENTS: 65B/1245/CD, 65B/1258/CC	

IEC SC 65B : MEASUREMENT AND CONTROL DEVICES	
SECRETARIAT: United States of America	SECRETARY: Mr Wallie Zoller
OF INTEREST TO THE FOLLOWING COMMITTEES:	HORIZONTAL FUNCTION(S):
ASPECTS CONCERNED:	
<input checked="" type="checkbox"/> SUBMITTED FOR CENELEC PARALLEL VOTING Attention IEC-CENELEC parallel voting The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting. The CENELEC members are invited to vote through the CENELEC online voting system.	<input type="checkbox"/> NOT SUBMITTED FOR CENELEC PARALLEL VOTING

<https://standards.iteh.ai/catalog/standards/sist/8296b750-3ea6-4eaf-a70c-7ec63065d97a/osist-pren-iec-61298-1-2024>

<https://standards.iteh.ai/catalog/standards/sist/8296b750-3ea6-4eaf-a70c-7ec63065d97a/osist-pren-iec-61298-1-2024>

This document is still under study and subject to change. It should not be used for reference purposes.

Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Recipients of this document are invited to submit, with their comments, notification of any relevant "In Some Countries" clauses to be included should this proposal proceed. Recipients are reminded that the CDV stage is the final stage for submitting ISC clauses. (SEE [AC/22/2007](#) OR [NEW GUIDANCE DOC](#)).

TITLE:

Process measurement and control devices - General methods and procedures for evaluating performance - Part 1: General considerations

PROPOSED STABILITY DATE: 2028

NOTE FROM TC/SC OFFICERS:

Copyright © 2024 International Electrotechnical Commission, IEC. All rights reserved. It is permitted to download this electronic file, to make a copy and to print out the content for the sole purpose of preparing National Committee positions. You may not copy or "mirror" the file or printed version of the document, or any part of it, for any other purpose without permission in writing from IEC.

CONTENTS

1		
2	FOREWORD.....	4
3	INTRODUCTION.....	6
4	1 Scope.....	7
5	2 Normative references	7
6	3 Terms and definitions	7
7	4 Test categories.....	9
8	5 General criteria	10
9	5.1 Realistic operating conditions.....	10
10	5.2 Economic aspects	10
11	5.3 Replication of the tests and comparability of the results	10
12	5.3.1 Standardization of test methods	10
13	5.3.2 Influence factors	10
14	5.3.3 Documentation of the test methods.....	10
15	5.4 Processing the results	10
16	5.5 Independence of the results of a test from the effects of other tests	11
17	6 General conditions for tests and samples	11
18	6.1 Environmental test conditions.....	11
19	6.1.1 Recommended limits of ambient conditions for test measurements.....	11
20	6.2 Supply conditions	11
21	6.2.1 Reference values.....	11
22	6.2.2 Tolerances	11
23	6.3 Load conditions	12
24	6.4 Mounting position	12
25	6.5 Externally induced vibrations	12
26	6.6 External mechanical constraints	12
27	6.7 Selection	13
28	6.7.1 Criteria	13
29	6.7.2 Selection procedures	13
30	6.8 Delivery of the devices	13
31	6.9 Identification and inspection	13
32	7 General testing procedures and precautions.....	13
33	7.1 Test laboratory	13
34	7.2 Preparation for the tests	14
35	7.3 Choice of reference measuring equipment.....	14
36	7.3.1 Criteria	14
37	7.3.2 Uncertainty of the measuring system	14
38	7.3.3 Traceability.....	14
39	7.4 Input variable quality	14
40	7.5 Tapping.....	15
41	7.6 Checking of calibration made as delivered.....	15
42	7.7 Sequence of tests	15
43	7.8 Interruption and duration of each series of measurements.....	15
44	7.9 Anomalies and failures during tests	15
45	7.9.1 General	15
46	7.9.2 Procedures	15
47	7.10 Re-start of a test	15

48	7.11	Setting of adjustments	16
49	7.12	Preconditioning	16
50	7.12.1	Criteria	16
51	7.12.2	Procedure.....	16
52	7.13	Calibration adjustments of lower range value and span	16
53	7.14	Constancy of the operating conditions and settings	16
54	7.15	Input/output variable relationships	16
55	7.15.1	Criteria	16
56	7.15.2	Procedure.....	16
57	7.16	Error assessment	17
58	7.17	Symbols and units of measurement	17
59	7.18	Test report and documentation	17
60			
61			
62			

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[oSIST prEN IEC 61298-1:2024](https://standards.iteh.ai/catalog/standards/sist/8296b750-3ea6-4eaf-a70c-7ec63065d97a/osist-pren-iec-61298-1-2024)

<https://standards.iteh.ai/catalog/standards/sist/8296b750-3ea6-4eaf-a70c-7ec63065d97a/osist-pren-iec-61298-1-2024>

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PROCESS MEASUREMENT AND CONTROL DEVICES –
GENERAL METHODS AND PROCEDURES FOR
EVALUATING PERFORMANCE –****Part 1: General considerations**

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 provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.
- 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 61298-1 has been prepared by subcommittee 65B: Devices and process analysis, of IEC technical committee 65: Industrial-process measurement, control and automation.

This second edition cancels and replaces the first edition published in 1995 and constitutes a technical revision.

This edition is a general revision with respect to the previous edition and does not include any significant changes (see Introduction).