



SLOVENSKI STANDARD

SIST EN 61298-3:1998

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Process measurement and control devices - General methods and procedures for evaluating performance - Part 3: Tests for the effects of influence quantities (IEC 61298-3:1998)

Process measurement and control devices - General methods and procedures for evaluating performance -- Part 3: Tests for the effects of influence quantities

Prozeßmeß-, -steuer- und -regelgeräte - Allgemeine Methoden und Verfahren für die Bewertung des Betriebsverhaltens -- Teil 3: Prüfungen für die Wirkungen von Einflußgrößen

Dispositifs de mesure et de commande de processus - Méthodes et procédures générales d'évaluation des performances -- Partie 3: Essais pour la détermination des effets des grandeurs d'influence

Ta slovenski standard je istoveten z: EN 61298-3:1998

ICS:

25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control
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Descriptors: Process measurement and control device, evaluating performances, influence quantity, test

English version

**Process measurement and control devices
General methods and procedures for evaluating performance
Part 3: Tests for the effects of influence quantities
(IEC 61298-3:1998)**

Dispositifs de mesure et de commande
de processus
Méthodes et procédures générales
d'évaluation des performances
Partie 3: Essais pour la détermination
des effets des grandeurs d'influence
(CEI 61298-3:1998)

Prozeß-, -steuer- und -regelgeräte
Allgemeine Methoden und Verfahren für
die Bewertung des Betriebsverhaltens
Teil 3: Prüfungen für die Wirkungen von
Einflußgrößen
(IEC 61298-3:1998)

This European Standard was approved by CENELEC on 1998-04-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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CENELEC

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

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Foreword

The text of document 65B/320/FDIS, future edition 1 of IEC 61298-3, prepared by SC 65B, Devices, of IEC TC 65, Industrial-process measurement and control, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61298-3 on 1998-04-01.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 1999-01-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2001-01-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61298-3:1998 was approved by CENELEC as a European Standard without any modification.

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-3	1969	Environmental testing Part 2: Tests Test Ca: Damp heat, steady state	HD 323.2.3 S2 ¹⁾	1987
IEC 60068-2-6 + corr. March	1995 1995	Part 2: Tests Test Fc: Vibration (sinusoidal)	EN 60068-2-6	1995
IEC 60068-2-31	1969	Part 2: Tests Test Ec: Drop and topple, primarily for equipment-type specimens	EN 60068-2-31 ²⁾	1993
IEC 60654-1	1993	Industrial-process measurement and control equipment Operating conditions Part 1: Climatic conditions	EN 60654-1	1993
IEC 60902	1987	Industrial-process measurement and control Terms and definitions	-	-
IEC 61000-4-2	1995	Electromagnetic compatibility (EMC) Part 4: Testing and measurement techniques Section 2: Electrostatic discharge immunity test - Basic EMC publication	EN 61000-4-2	1995
IEC 61000-4-3 (mod)	1995	Part 4: Testing and measurement techniques Section 3: Radiated, radio-frequency, electromagnetic field immunity test Basic EMC publication	EN 61000-4-3	1996
IEC 61000-4-4	1995	Part 4: Testing and measurement techniques Section 4: Electrical fast transient/burst immunity test - Basic EMC publication	EN 61000-4-4	1995

1) HD 323.2.3 S2 includes A1:1984 to IEC 60068-2-3.

2) EN 60068-2-31 includes A1:1982 to IEC 60068-2-31.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-5	1995	Part 4: Testing and measurement techniques Section 5: Surge immunity test	EN 61000-4-5	1995
IEC 61298-1	1995	Process measurement and control devices General methods and procedures for evaluating performance Part 1: General considerations	EN 61298-1	1995
IEC 61298-2	1995	Part 2: Tests under reference conditions	EN 61298-2	1995
IEC 61298-4	1995	Part 4: Evaluation report content	EN 61298-4	1995

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de processus –
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des performances –**

**Partie 3:
Essais pour la détermination des effets
des grandeurs d'influence**

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**Process measurement and control devices –
General methods and procedures for
evaluating performance –**

**Part 3:
Tests for the effects of influence quantities**

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Commission Electrotechnique Internationale
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Международная Электротехническая Комиссия

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CONTENTS

	Page
FOREWORD	7
INTRODUCTION	9
Clause	
1 Scope.....	11
2 Normative references	11
3 Definitions	13
4 General considerations	15
4.1 Criteria	15
4.2 General procedures	15
5 Ambient temperature effects	17
5.1 Criteria	17
5.2 Test procedure	17
6 Ambient relative humidity effects.....	19
7 Vibration.....	21
7.1 General considerations.....	21
7.2 Initial resonance search.....	23
7.3 Endurance conditioning by sweeping.....	23
7.4 Final resonance search.....	23
7.5 Final measurements	23
8 Shock, drop and topple.....	23
9 Mounting position.....	25
10 Over-range	25
11 Output load effects	27
11.1 Electrical output.....	27
11.2 Pneumatic output.....	27
12 Power supply effects.....	27
12.1 Supply voltage and frequency variations.....	27
12.2 Transient supply voltage effects	29
12.3 Supply voltage depression	29
12.4 Short-term supply voltage interruptions	31
12.5 Fast transient/burst immunity requirements	31
12.6 Surge immunity requirements	33
12.7 Reverse supply voltage protection (d.c. devices).....	33
12.8 Supply pressure variations	33
12.9 Supply pressure interruptions.....	33
13 Electrical interference	35
13.1 Common mode interference.....	35
13.2 Normal mode interference (series mode)	37
13.3 Earthing.....	39

Clause	Pages
14 Harmonic distortion effects	39
15 Magnetic field effects	41
16 Radiated electromagnetic interference	43
16.1 General considerations	43
16.2 Procedure.....	45
17 Electrostatic discharge.....	47
17.1 General considerations	47
17.2 Procedure.....	47
18 Effect of open-circuited and short-circuited input	51
19 Effect of open-circuited and short-circuited output	51
20 Effects of process medium conditions	51
20.1 Temperature of process fluid	51
20.2 Flow of process fluid through the device.....	53
20.3 Static line pressure effect	53
21 Atmospheric pressure effects.....	55
22 Flow of purge gas through the device	55
23 Accelerated operational life test	55
24 Operational long-term drift test.....	57

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SIST EN 61298-3:1998

<https://standards.iteh.ai/catalog/standards/sist/cb205733-c7f6-4ef6-8ade-54736fddabc2/sist-en-61298-3-1998>

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PROCESS MEASUREMENT AND CONTROL DEVICES –
GENERAL METHODS AND PROCEDURES
FOR EVALUATING PERFORMANCE –**
Part 3: Tests for the effects of influence quantities

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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 the 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 National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61298-3 has been prepared by subcommittee 65B: Devices, of IEC technical committee 65: Industrial-process measurement and control.

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

FDIS	Report on voting
65B/320/FDIS	65B/331/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.

IEC 61298 consists of the following parts, under the general title *Process measurement and control devices – General methods and procedures for evaluating performance*:

- Part 1: 1995, General considerations
- Part 2: 1995, Tests under reference conditions
- Part 3: 1997, Tests for the effects of influence quantities
- Part 4: 1995, Evaluation report content

INTRODUCTION

This standard is not intended as a substitute for existing standards, but is rather intended as a reference document for any future standard developed within the IEC, or other standards organizations, concerning the evaluation of process instrumentation. Any revision of existing standards should take this standard into account.

This common standardized basis should be utilized for the preparation of future relevant standards, as follows:

- any test method or procedure, already treated in this standard, should be specified and described in the new standard by referring to the corresponding clause of this standard;
- any particular method or procedure, not covered by this standard, should be developed and specified in the new standard in accordance with the criteria, as far as they are applicable, stated in this standard;
- any conceptual or significant deviation from the content of this standard should be clearly identified and justified if introduced in a new standard.

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PROCESS MEASUREMENT AND CONTROL DEVICES – GENERAL METHODS AND PROCEDURES FOR EVALUATING PERFORMANCE –

Part 3: Tests for the effects of influence quantities

1 Scope

This part of IEC 61298 specifies general methods and procedures for conducting tests and reporting on the functional and performance characteristics of process measurement and control devices. The tests are applicable to any such devices characterized by their own specific input and output variables, and by the specific relationship (transfer function) between the inputs and outputs, and include analogue and digital devices. For devices that require special tests, this part of IEC 61298 is to be used, together with any product-specific standard specifying special tests.

This part of IEC 61298 covers tests for the effects of influence quantities.

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2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61298. At the time of publication, the editions indicated were valid. All normative documents are subject to revision and parties to agreements based on this part of IEC 61298 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60068-2-3:1969, *Environmental testing – Part 2: Tests – Test Ca: Damp heat, steady state*

IEC 60068-2-6:1995, *Environmental testing – Part 2: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60068-2-31:1969, *Environmental testing – Part 2: Tests – Test Ec: Drop and topple, primarily for equipment-type specimens*

IEC 60654-1:1993, *Industrial-process measurement and control equipment – Operating conditions – Part 1: Climatic conditions*

IEC 60902:1987, *Industrial-process measurement and control – Terms and definitions*

IEC 61000-4-2:1995, *Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 2: Electrostatic discharge immunity test. Basic EMC publication*

IEC 61000-4-3:1995, *Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 3: Radiated, radio-frequency, electromagnetic field immunity test. Basic EMC publication*