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Industriell processtyrning – Allmänna metoder och procedurer för utvärdering av prestanda – Del 1: Allmänt

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

Som svensk standard gäller europastandarden EN 61298-1:2008. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61298-1:2008.

Nationellt förord

Europastandarden EN 61298-1:2008

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61298-1, Second edition, 2008 - Process measurement and control devices - General methods and procedures for evaluating performance - Part 1: General considerations**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 61298-1, utgåva 1, 1996, gäller ej fr o m 2011-11-01.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

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Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

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Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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English version

**Process measurement and control devices -
General methods and procedures for evaluating performance -
Part 1: General considerations
(IEC 61298-1:2008)**

Dispositifs de mesure
et de commande de processus -
Méthodes et procédures générales
d'évaluation des performances -
Partie 1: Généralités
(CEI 61298-1:2008)

Prozessmess-, -steuer- und -regelgeräte -
Allgemeine Methoden und Verfahren für
die Bewertung des Betriebsverhaltens -
Teil 1: Allgemeine Betrachtungen
(IEC 61298-1:2008)

This European Standard was approved by CENELEC on 2008-11-01. 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.

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

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 65B/685/FDIS, future edition 2 of IEC 61298-1, prepared by SC 65B, Devices & process analysis, of IEC TC 65, Industrial-process measurement, control and automation, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61298-1 on 2008-11-01.

This European Standard supersedes EN 61298-1:1995.

EN 61298-1:2008 is a general revision with respect to EN 61298-1:1995 and does not include any significant changes (see Introduction).

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) 2009-08-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2011-11-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61298-1:2008 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 referenced documents are indispensable for the application 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 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 60050-300	- ¹⁾	International Electrotechnical Vocabulary (IEV) - Electrical and electronic measurements and measuring instruments - Part 311: General terms relating to measurements - Part 312: General terms relating to electrical measurements - Part 313: Types of electrical measuring instruments - Part 314: Specific terms according to the type of instrument	-	-
IEC 60050-351	- ¹⁾	International Electrotechnical Vocabulary (IEV) - Part 351: Control technology	-	-
IEC 60410	1973	Sampling plans and procedures for inspection by attributes	-	-
IEC 61298-2	- ¹⁾	Process measurement and control devices - General methods and procedures for evaluating performance - Part 2: Tests under reference conditions	EN 61298-2	2008 ²⁾
IEC 61298-4	- ¹⁾	Process measurement and control devices - General methods and procedures for evaluating performance - Part 4: Evaluation report content	EN 61298-4	2008 ²⁾
ISO 31	Series	Quantities and units	-	-

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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INTRODUCTION

This standard is not intended as a substitute for existing standards, but is rather intended as a reference document for any future standards 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. Consequently new editions of this standard are revised without any change in numbering and scope of each clause;
- 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 clearly be identified and justified if introduced in a new standard.

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

Part 1: General considerations

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 methods and procedures specified in this standard are applicable to any type of process measurement and control device. 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 standard should be used, together with any product specific standard specifying special tests.

This standard covers general principles which apply to the series.

2 Normative references

The following referenced documents are indispensable for the application 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.

IEC 60050-300, *International Electrotechnical Vocabulary (IEV) – Electrical and electronic measurements and measuring instruments (composed of Part 311, 312, 313 and 314)*

IEC 60050-351, *International Electrotechnical Vocabulary (IEV) – Part 351: Control technology*

IEC 60410:1973, *Sampling plans and procedures for inspection by attributes*

IEC 61298-4, *Process measurement and control devices – General methods and procedures for evaluating performance – Part 4: Evaluation report content*

IEC 61298-2, *Process measurement and control devices – General methods and procedures for evaluating performance – Part 2: Tests under reference conditions*

ISO 31 (all parts), *Quantities and units*

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