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## Industriell processtyrning – Idrifttagning av system för el, instrumentering och automation i processindustrin – Faser och milstolpar

*Commissioning of electrical, instrumentation and control systems in the process industry –  
Specific phases and milestones*

Som svensk standard gäller europastandarden EN 62337:2012. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62337:2012.

### Nationellt förord

Europastandarden EN 62337:2012

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 62337, Second edition, 2012 - Commissioning of electrical, instrumentation and control systems in the process industry - Specific phases and milestones**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 62337, utgåva 1, 2008, gäller ej fr o m 2015-03-28.

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ICS 25.040.40; 91.010; 91.040

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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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Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

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.

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

### **SEK Svensk Elstandard**

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English version

**Commissioning of electrical, instrumentation and control systems in the  
process industry -  
Specific phases and milestones  
(IEC 62337:2012)**

Mise en service des systèmes électriques,  
de mesure et de commande dans  
l'industrie de transformation -  
Phases et jalons spécifiques  
(CEI 62337:2012)

Inbetriebnahme elektrischer und  
leittechnischer Systeme in der  
verfahrenstechnischen Industrie -  
Phasen und Meilensteine  
(IEC 62337:2012)

This European Standard was approved by CENELEC on 2012-03-28. 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, 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.

**CENELEC**

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

### Foreword

The text of document 65E/221/FDIS, future edition 2 of IEC 62337, prepared by SC 65E, "Devices and integration in enterprise systems", of IEC TC 65, "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62337:2012.

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) 2012-12-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-03-28

This document supersedes EN 62337:2007.

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.

### Endorsement notice

The text of the International Standard IEC 62337:2012 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 61331 series | NOTE | Harmonized in EN 61331 series. |
| IEC 61355-1      | NOTE | Harmonized as EN 61355-1.      |

**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 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 62079	-	Preparation of instructions - Structuring, content and presentation	EN 62079	-
IEC 62424	-	Representation of process control engineering - Requests in P&I diagrams and data exchange between P&ID tools and PCE-CAE tools	EN 62424	-
ISO 10628-2 <sup>1)</sup>	-	Diagrams for the chemical and petrochemical industry - Part 2: Graphical symbols	EN ISO 10628-2 <sup>1)</sup>	-
ANSI/ISA S7.0.01	-	Quality Standard for Instrument Air	-	-

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<sup>1)</sup> At draft stage.

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## INTRODUCTION

There is an increasing trend in the process industry to award the construction of whole plants to contractors on a lump-sum turnkey or similar commercial basis. Experience has shown that both the process industry (hereinafter called “the owner”) and the contractor have long and expensive discussions to lay down unambiguously the scope of activities to be taken by the contractor and the owner and their responsibilities to achieve the handover of the plant.

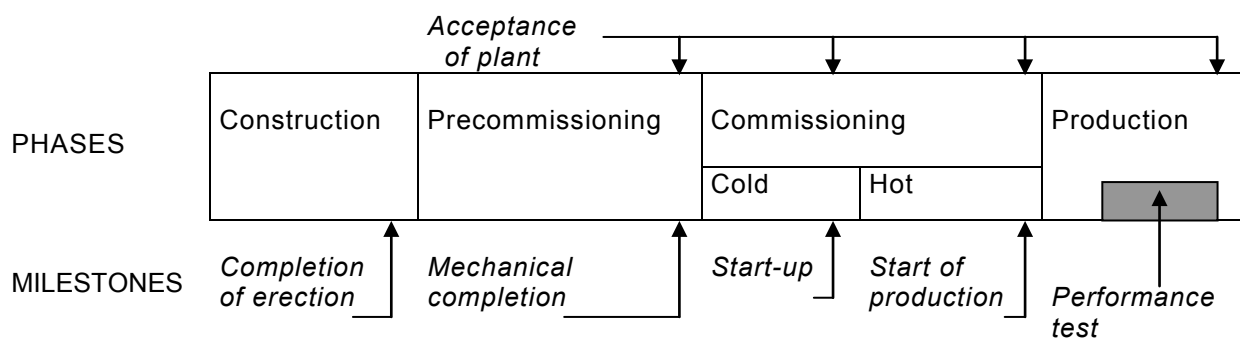
This standard is intended to lead to an improvement and acceleration of the negotiation phase and to a mutual understanding about the scope of the activities of each party.

## COMMISSIONING OF ELECTRICAL, INSTRUMENTATION AND CONTROL SYSTEMS IN THE PROCESS INDUSTRY – SPECIFIC PHASES AND MILESTONES

### 1 Scope

This International Standard defines specific phases and milestones (see Figure 1) in the commissioning of electrical, instrumentation and control systems in the process industry. By way of example, it describes activities following the “completion-of-erection” milestone of the project and prior to the “acceptance-of-the-plant” phase by the owner. Such activities need to be adapted for each type of process/plant concerned.

NOTE This standard assumes that the “acceptance-of-the-plant” milestone will occur after the performance test. If there is a reduced scope, this document should be adapted accordingly.



IEC 135/12

NOTE Construction and precommissioning activities could be overlapping.

**Figure 1 – Definition of phases and milestones**

For application in the pharmaceutical or other highly specialized industries, additional guidelines (for example, *Good Automated Manufacturing Practice (GAMP)*), definitions and stipulations should apply in accordance with existing standards, for example, for GMP Compliance 21 CFR (FDA) and the Standard Operating Procedure of the European Medicines Agency (SOP/INSP/2003).

### 2 Normative references

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.

IEC 62079, *Preparation of instruction – Structuring, content and presentation*

IEC 62424, *Representation of process control engineering – Requests in P&I diagrams and data exchange between P&ID tools and PCE-CAE tools*

ISO 10628-2, *Diagrams for chemical and petrochemical industry – Part 2: Graphical symbols*

ISA-S7.0.01, *Quality standard for instrument air*