

## **Elektrisk utrustning för mätning, styrning och laboratorieändamål – EMC-fordringar – Del 2-3: Särskilda fordringar – Provningssuppställningar, driftförhållanden och prestandavillkor för mätgivare med inbyggd eller separat signalbehandling**

*Electrical equipment for measurement, control and laboratory use –*

*EMC requirements –*

*Part 2-3: Particular requirements –*

*Test configuration, operational conditions and performance criteria for transducers with integrated or remote signal conditioning*

Som svensk standard gäller europastandarden EN 61326-2-3:2006. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61326-2-3:2006.

### **Nationellt förord**

Europastandarden EN 61326-2-3:2006

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61326-2-3, First edition, 2006 - Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-3: Particular requirements - Test configuration, operational conditions and performance criteria for transducers with integrated or remote signal conditioning**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden skall användas tillsammans med SS-EN 61326-1.

Standarden bygger på och ersätter Bilaga F i tidigare fastställd svensk standard SS-EN 61326, utgåva 2, 2004.

Tidigare fastställd svensk standard SS-EN 61326, utgåva 2, 2004, gäller ej fr o m 2009-02-01.

### *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.

### *SEK är Sveriges röst i standardiseringsarbetet inom elområdet*

Svenska Elektriska Kommissionen, SEK, svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

### *Stora delar av arbetet sker internationellt*

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).

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.

### *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.

#### **SEK**

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[www.sekom.se](http://www.sekom.se)

**Electrical equipment for measurement, control and laboratory use -  
EMC requirements  
Part 2-3: Particular requirements -  
Test configuration, operational conditions and performance criteria  
for transducers with integrated or remote signal conditioning  
(IEC 61326-2-3:2006)**

Matériel électrique de mesure,  
de commande et de laboratoire -  
Exigences relatives à la CEM  
Partie 2-3: Exigences particulières -  
Configurations d'essai, conditions de  
fonctionnement et critères d'aptitude  
à la fonction des transducteurs avec  
un système de conditionnement  
du signal intégré ou à distance  
(CEI 61326-2-3:2006)

Elektrische Mess-, Steuer-, Regel- und  
Laborgeräte -  
EMV-Anforderungen  
Teil 2-3: Besondere Anforderungen -  
Prüfanordnung, Betriebsbedingungen  
und Leistungsmerkmale für  
Messgrößenumformer mit integrierter  
oder abgesetzter Signalaufbereitung  
(IEC 61326-2-3:2006)

This European Standard was approved by CENELEC on 2006-08-01. 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, 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 65A/477/FDIS, future edition 1 of IEC 61326-2-3, prepared by SC 65A, System aspects, of IEC TC 65, Industrial-process measurement and control, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61326-2-3 on 2006-08-01.

The EN 61326 series supersedes EN 61326:1997 + corrigendum September 1998 + A1:1998 + A2:2001 + A3:2003.

This part of EN 61326 is to be used in conjunction with EN 61326-1 and follows the same numbering of clauses, subclauses, tables and figures as that standard.

When a particular subclause of Part 1 is not mentioned in this part, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text in Part 1 is to be adapted accordingly.

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) 2007-05-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2009-08-01

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directive 89/336/EEC. See Annex ZZ.

NOTE The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in part 1, they are numbered starting from 101 including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.

Annexes ZA and ZZ have been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 61326-2-3:2006 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

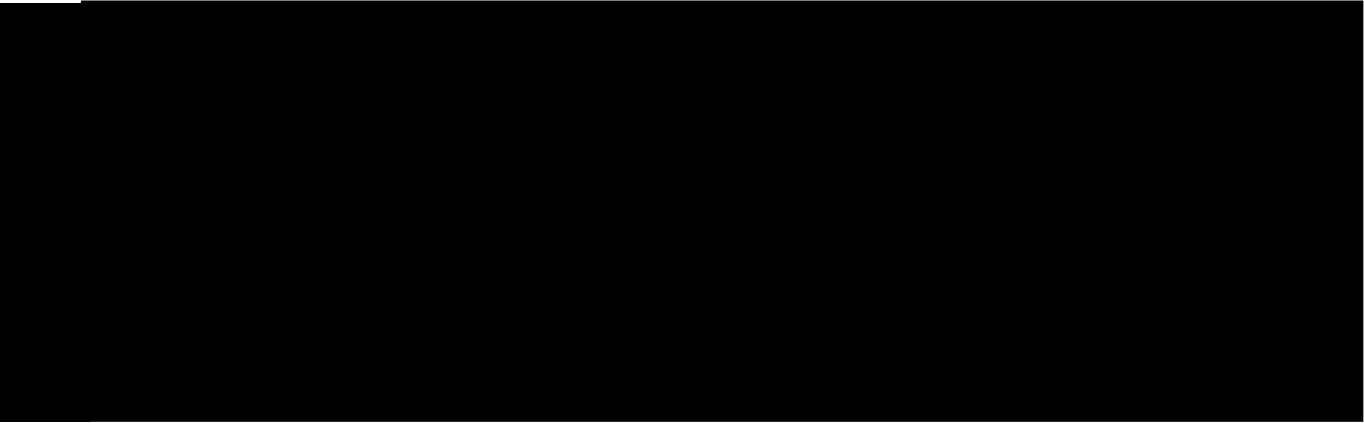
The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE Where 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>
<i>Addition to Annex ZA of EN 61326-1:2006:</i>				
IEC 60050-300	– <sup>1)</sup>	International Electrotechnical Vocabulary - 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	–	–

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<sup>1)</sup> Undated reference.



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**ELECTRICAL EQUIPMENT FOR MEASUREMENT,  
CONTROL AND LABORATORY USE –  
EMC REQUIREMENTS –**

**Part 2-3: Particular requirements – Test configuration,  
operational conditions and performance criteria  
for transducers with integrated or remote signal conditioning**

## **1 Scope**

In addition to the requirements of IEC 61326-1, this part of IEC 61326 specifies more detailed test configurations, operational conditions and performance criteria for transducers with integrated or remote signal conditioning.

This standard applies only to transducers characterized by their ability to transform, with the aid of an auxiliary energy source, a non-electric quantity to a process-relevant electrical signal, and to output the signal at one or more ports. This standard includes transducers for electrochemical and biological measured quantities.

The transducers covered by this standard may be powered by a.c. or d.c. voltage and/or by battery or with internal power supply.

Transducers referred to by this standard comprise at least the following items (see Figures 101 and 102):

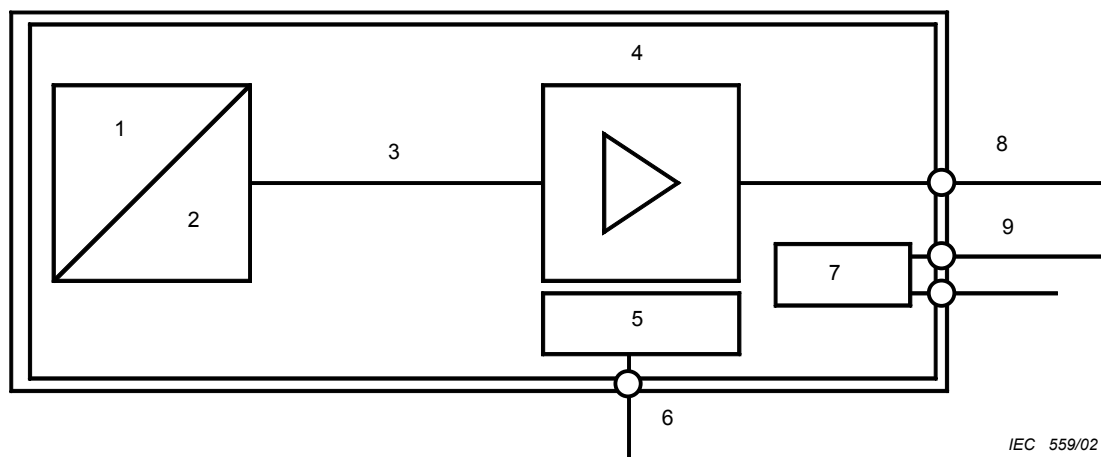
- one or more elements for transforming a non-electrical input quantity to an electrical quantity;
- a transmission link for transferral of the electrical quantity to a component for signal conditioning;
- a unit for signal conditioning that converts the electrical quantity to a process-relevant electrical signal;
- an enclosure for enclosing the above-stated components fully or in parts.

Transducers referred to by this standard may also have the following items (see Figures 101 and 102):

- a communication and control unit;
- a display unit;
- control elements such as keys, buttons, switches, etc.;
- transducer output signals (for example, switch outputs, alarm outputs) which are clearly assigned to the input signal(s);
- transducers with signal conditioning which may be integrated or remote.

The manufacturer specifies the environment for which the product is intended to be used and utilizes the corresponding test levels of IEC 61326-1.

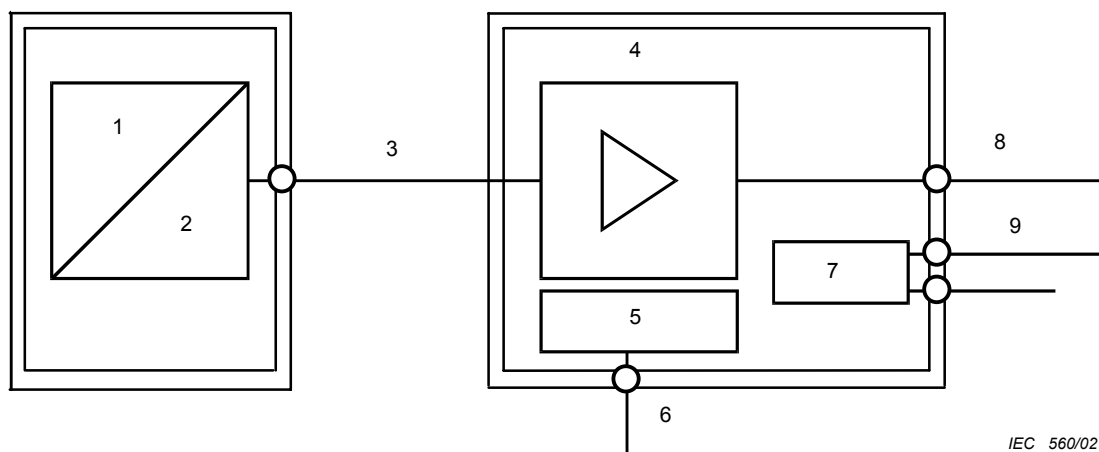
Additional requirements and exceptions for specific types of transducers are given in the annexes to this standard.



IEC 559/02

**Key**

- 1 Non-electrical quantity
- 2 Electrical quantity
- 3 Transmission link
- 4 Signal conditioning
- 5 Communication and control unit
- 6 Input/output ports
- 7 Power supply
- 8 Signal port
- 9 AC/DC port

**Figure 101 – Example of a transducer with integrated signal conditioning**

IEC 560/02

**Key**

- 1 Non-electrical quantity
- 2 Electrical quantity
- 3 Transmission link
- 4 Signal conditioning
- 5 Communication and control unit
- 6 Input/output ports
- 7 Power supply
- 8 Signal port
- 9 AC/DC port

**Figure 102 – Example of a transducer with remote signal conditioning**