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## **Mättransformatorer – Del 2: Tilläggsfordringar för strömtransformatorer**

*Instrument transformers –  
Part 2: Additional requirements for current transformers*

Som svensk standard gäller europastandarden EN 61869-2:2012. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61869-2:2012.

### **Nationellt förord**

Europastandarden EN 61869-2:2012

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61869-2, First edition, 2012 - Instrument transformers - Part 2: Additional requirements for current transformers**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN 61869-1, utgåva 1, 2009.

Tidigare fastställd svensk standard SS-EN 60044-1, utgåva 1, 2000, SS-EN 60044-1/A1, utgåva 1, 2000, SS-EN 60044-1/A2, utgåva 1, 2003 och SS-EN 60044-6, utgåva 1, 2000, gäller ej fr o m 2015-10-23.

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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.

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**Instrument transformers -  
Part 2: Additional requirements for current transformers  
(IEC 61869-2:2012)**

Transformateurs de mesure -  
Partie 2: Exigences supplémentaires  
concernant les transformateurs de courant  
(CEI 61869-2:2012)

Messwandler -  
Teil 2: Zusätzliche Anforderungen für  
Stromwandler  
(IEC 61869-2:2012)

This European Standard was approved by CENELEC on 2012-10-23. 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.

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**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 38/435/FDIS, future edition 1 of IEC 61869-2, prepared by IEC/TC 38, "Instrument transformers" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61869-2:2012.

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) 2013-07-23
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-10-23

This document supersedes EN 60044-1:1999 + A1:2000 + A2:2003 and EN 60044-6:1999.

Additionally it introduces technical innovations in the standardization and adaptation of the requirements for current transformers for transient performance.

This Part 2 is to be used in conjunction with, and is based on, EN 61869-1:2009, *General Requirements* – however the reader is encouraged to use its most recent edition.

This Part 2 follows the structure of EN 61869-1:2009 and supplements or modifies its corresponding clauses.

When a particular clause/subclause of Part 1 is not mentioned in this Part 2, that clause/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.

For additional clauses, subclauses, figures, tables, annexes or notes, the following numbering system is used:

– clauses, subclauses, tables, figures and notes that are numbered starting from 201 are additional to those in Part 1;

– additional annexes are lettered 2A, 2B, etc.

Annex ZZ of EN 61869-1 is not applicable for this part of the series.

An overview of the planned set of standards at the date of publication of this document is given below. The updated list of standards prepared by IEC TC38 is available at the website: [www.iec.ch](http://www.iec.ch); the updated list of standards prepared by IEC TC38 and approved by CENELEC is available at the website: [www.cenelec.eu](http://www.cenelec.eu).

| PRODUCT FAMILY STANDARDS                                           |                                                                                                                           | PRODUCT STANDARD | PRODUCTS                                                                                               | OLD STANDARD |
|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------------|--------------|
| <b>61869-1</b><br>GENERAL REQUIREMENTS FOR INSTRUMENT TRANSFORMERS | <b>61869-6</b><br>ADDITIONAL GENERAL REQUIREMENT FOR ELECTRONIC INSTRUMENT TRANSFORMERS AND LOW POWER STAND ALONE SENSORS | <b>61869-2</b>   | ADDITIONAL REQUIREMENTS FOR CURRENT TRANSFORMERS                                                       | 60044-1      |
|                                                                    |                                                                                                                           | <b>61869-3</b>   | ADDITIONAL REQUIREMENTS FOR INDUCTIVE VOLTAGE TRANSFORMERS                                             | 60044-2      |
|                                                                    |                                                                                                                           | <b>61869-4</b>   | ADDITIONAL REQUIREMENTS FOR COMBINED TRANSFORMERS                                                      | 60044-3      |
|                                                                    |                                                                                                                           | <b>61869-5</b>   | ADDITIONAL REQUIREMENTS FOR CAPACITIVE VOLTAGE TRANSFORMERS                                            | 60044-5      |
|                                                                    |                                                                                                                           | <b>61869-7</b>   | ADDITIONAL REQUIREMENTS FOR ELECTRONIC VOLTAGE TRANSFORMERS                                            | 60044-7      |
|                                                                    |                                                                                                                           | <b>61869-8</b>   | ADDITIONAL REQUIREMENTS FOR ELECTRONIC CURRENT TRANSFORMERS                                            | 60044-8      |
|                                                                    |                                                                                                                           | <b>61869-9</b>   | DIGITAL INTERFACE FOR INSTRUMENT TRANSFORMERS                                                          |              |
|                                                                    |                                                                                                                           | <b>61869-10</b>  | ADDITIONAL REQUIREMENTS FOR LOW-POWER STAND-ALONE CURRENT SENSORS                                      |              |
|                                                                    |                                                                                                                           | <b>61869-11</b>  | ADDITIONAL REQUIREMENTS FOR LOW POWER STAND ALONE VOLTAGE SENSOR                                       | 60044-7      |
|                                                                    |                                                                                                                           | <b>61869-12</b>  | ADDITIONAL REQUIREMENTS FOR COMBINED ELECTRONIC INSTRUMENT TRANSFORMER OR COMBINED STAND ALONE SENSORS |              |
|                                                                    |                                                                                                                           | <b>61869-13</b>  | STAND ALONE MERGING UNIT                                                                               |              |

Since the publication of EN 60044-6 (*Requirements for protective current transformers for transient performance*) in 1999, the area of application of this kind of current transformers has been extended. As a consequence, the theoretical background for the dimensioning according to the electrical requirements has become much more complex. In order to keep this standard as user-friendly as possible, the explanation of the background information will be transferred to the Technical Report IEC/TR 61869-100, which is now in preparation.

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.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

### Endorsement notice

The text of the International Standard IEC 61869-2:2012 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 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.

***Addition to Annex ZA of EN 61869-1:2009:***

| <u>Publication</u> | <u>Year</u> | <u>Title</u>                                              | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|-----------------------------------------------------------|--------------|-------------|
| IEC 61869-1 (mod)  | 2007        | Instrument transformers -<br>Part 1: General requirements | EN 61869-1   | 2009        |

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## **INSTRUMENT TRANSFORMERS –**

### **Part 2: Additional requirements for Current Transformers**

#### **1 Scope**

This part of IEC 61869 is applicable to newly manufactured inductive current transformers for use with electrical measuring instruments and/or electrical protective devices having rated frequencies from 15 Hz to 100 Hz.

#### **2 Normative references**

Clause 2 of IEC 61869-1:2007 is applicable with the following additions:

IEC 61869-1:2007, *Instrument Transformers – Part 1: General requirements*