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Mättransformatorer – Del 5: Tilläggsfordringar för kapacitiva spänningstransformatorer

Instrument transformers –

Part 5: Additional requirements for capacitor voltage transformers

Som svensk standard gäller europastandarden EN 61869-5:2011. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61869-5:2011.

Nationellt förord

Europastandarden EN 61869-5:2011

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61869-5, First edition, 2011 - Instrument transformers - Part 5: Additional requirements for capacitor voltage 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 60044-5, utgåva 1, 2004, gäller ej fr o m 2014-08-17.

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English version

**Instrument transformers -
Part 5: Additional requirements for capacitor voltage transformers
(IEC 61869-5:2011)**

Transformateurs de mesure -
Partie 5: Exigences supplémentaires
concernant les transformateurs
condensateurs de tension
(CEI 61869-5:2011)

Messwandler -
Teil 5: Zusätzliche Anforderungen für
kapazitive Spannungswandler
(IEC 61869-5:2011)

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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 38/411/FDIS, future edition 1 of IEC 61869-5, prepared by IEC/TC 38, "Instrument transformers", was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61869-5:2011.

The following dates are 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) 2012-05-17
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2014-08-17

This European Standard supersedes EN 60044-5:2004 regarding capacitor voltage transformers.

EN 61869-5:2011 shall be read in conjunction with, and is based on, EN 61869-1:2009, Instrument transformers - General Requirements.

This Part 5 follows the structure of EN 61869-1 and supplements or modifies its corresponding clauses.

When a particular clause/subclause of Part 1 is not mentioned in this Part 5, that clause/subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text in Part 1 shall 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 501 are additional to those in Part 1;
- additional annexes are lettered 5A, 5B, 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.

The updated list of standards prepared by IEC TC38 and approved by CENELEC is available at the website: www.cenelec.eu.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

PRODUCT FAMILY STANDARDS	PRODUCT STANDARD	PRODUCTS	OLD STANDARD
61869-1 GENERAL REQUIREMENTS FOR INSTRUMENT TRANSFORMERS	61869-2	ADDITIONAL REQUIREMENTS FOR CURRENT TRANSFORMERS	60044-1
	61869-3	ADDITIONAL REQUIREMENTS FOR INDUCTIVE VOLTAGE TRANSFORMERS	60044-2
	61869-4	ADDITIONAL REQUIREMENTS FOR COMBINED TRANSFORMERS	60044-3
	61869-5	ADDITIONAL REQUIREMENTS FOR CAPACITIVE VOLTAGE TRANSFORMERS	60044-5
	61869-6 ADDITIONAL GENERAL REQUIREMENT FOR ELECTRONIC INSTRUMENT TRANSFORMERS AND LOW POWER STAND ALONE SENSORS	61869-7	60044-7
		61869-8	60044-8
		61869-9	
		61869-10	
		61869-11	60044-7
		61869-12	
		61869-13	

Endorsement notice

The text of the International Standard IEC 61869-5:2011 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60422

NOTE Harmonized as EN 60422.

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.

Annex ZA of EN 61869-1:2009 applies with the following additions:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60038 (mod)	2009	IEC standard voltages	EN 60038	2011
IEC 60050-436	-	International Electrotechnical Vocabulary (IEV) - Chapter 436: Power capacitors	-	-
IEC 60050-601	-	International Electrotechnical Vocabulary (IEV) - Chapter 601: Generation, transmission and distribution of electricity - General	-	-
IEC 60050-604	-	International Electrotechnical Vocabulary (IEV) - Chapter 604: Generation, transmission and distribution of electricity - Operation	-	-
IEC 60060-1	-	High-voltage test techniques - Part 1: General definitions and test requirements	EN 60060-1	-
IEC 60358	-	Coupling capacitors and capacitor dividers	HD 597 S1	-
IEC 60481	-	Coupling devices for power line carrier systems	-	-
IEC 61869-1 (mod)	2007	Instrument transformers - Part 1: General requirements	EN 61869-1	2009

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INSTRUMENT TRANSFORMERS –

Part 5: Additional requirements for capacitor voltage transformers

1 Scope

This part of IEC 61869 applies to new single-phase capacitor voltage transformers connected between line and ground for system voltages $U_m \geq 72,5$ kV at power frequencies from 15 Hz to 100 Hz. They are intended to supply a low voltage for measurement, control and protective functions.

The capacitor voltage transformer can be equipped with or without carrier-frequency accessories for power line carrier-frequency (PLC) application at carrier frequencies from 30 kHz to 500 kHz.

The base requirements for coupling capacitors and capacitors dividers are defined in IEC 60358. The transmission requirements for coupling devices for power line carrier (PLC) system are defined in IEC 60481.

The measurement application includes both indication measuring and revenue measuring.

NOTE 501 Diagrams of capacitor voltage transformer to which this standard applies are given in Figures 5A.1 and 5A.2.

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*

IEC 60038 ed7.0 (2009-06) – *IEC standard voltages*

IEC 60060-1, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60050-436, *International Electrotechnical Vocabulary (IEV) – Chapter 436: Power capacitors*

IEC 60050-601, *International Electrotechnical Vocabulary (IEV) – Chapter 601: Generation, transmission and distribution of electricity – General*

IEC 60050-604, *International Electrotechnical Vocabulary (IEV) – Chapter 604: Generation, transmission and distribution of electricity – Operation*

IEC 60358, *Coupling capacitors and capacitor dividers*

IEC 60481, *Coupling devices for power line carrier systems*