

Instrument transformers - Part 6: Additional general requirements for low-power instrument transformers

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 61869-6:2016 sisaldab Euroopa standardi EN 61869-6:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 61869-6:2016 consists of the English text of the European standard EN 61869-6:2016.
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English Version

**Instrument transformers - Part 6: Additional general
requirements for low-power instrument transformers
(IEC 61869-6:2016)**

Transformateurs de mesure - Partie 6: Exigences générales
supplémentaires concernant les transformateurs de mesure
de faible puissance
(IEC 61869-6:2016)

Messwandler - Teil 6: Zusätzliche allgemeine
Anforderungen für Kleinsignal-Messwandler
(IEC 61869-6:2016)

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of document 38/501/FDIS, future edition 1 of IEC 61869-6, prepared by IEC/TC 38 "Instrument transformers" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61869-6:2016.

The following dates are fixed:

- latest date by which the document has to be (dop) 2017-06-23
implemented at national level by
publication of an identical national
standard or by endorsement
- latest date by which the national (dow) 2019-12-23
standards conflicting with the
document have to be withdrawn

This document is to be read jointly with, and is based on, EN 61869-1:2009, *General requirements*. However, the reader is encouraged to use the most recent edition of that document.

This document follows the structure of EN 61869 series and supplements or modifies the corresponding clauses in EN 61869-1 Standard.

When a particular clause/subclause of Part 1, is not mentioned in this Part 6, 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 601 are additional to those in Part 1;

– additional annexes are lettered 6A, 6B, etc.

This document, jointly with EN 61869-1:2009, supersedes EN 60044-7:2000 (partially) and EN 60044-8:2002 (partially).

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Endorsement notice

The text of the International Standard IEC 61869-6:2016 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 60044-7:1999	NOTE	Harmonized as EN 60044-7:2000 (not modified).
IEC 60044-8:2002	NOTE	Harmonized as EN 60044-8:2002 (not modified)
IEC 61508-1	NOTE	Harmonized as EN 61508-1.
IEC 61508-3	NOTE	Harmonized as EN 61508-3.
IEC 61850 Series	NOTE	Harmonized as EN 61850 Series.
IEC 61869 Series	NOTE	Harmonized as EN 61869 Series.
IEC 61869-5	NOTE	Harmonized as EN 61869-5.
IEC 61869-9	NOTE	Harmonized as EN 61869-9.
IEC 61869-10	NOTE	Harmonized as EN 61869-10.
IEC 61869-11	NOTE	Harmonized as EN 61869-11.

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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu

Annex ZA of EN 61869:2009 is applicable with the following additions:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
-	-	Voltage characteristics of electricity supplied by public electricity networks	EN 50160	2010
IEC 60068-2-6	2007	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	2008
IEC 60255-27	2013	Measuring relays and protection equipment - Part 27: Product safety requirements	EN 60255-27	2014
IEC 60603-7-1	2011	Connectors for electronic equipment - Part 7-1: Detail specification for 8-way, shielded, free and fixed connectors	EN 60603-7-1	2011
IEC 60794-2	2002	Optical fibre cables - Part 2: Indoor cables - Sectional specification	EN 60794-2	2003
IEC 60794-3	2014	Optical fibre cables - Part 3: Outdoor cables - Sectional specification	EN 60794-3	2015
IEC 60812	2006	Analysis techniques for system reliability - Procedure for failure mode and effects analysis (FMEA)	EN 60812	2006
IEC 61000-4-1	2006 ¹⁾	Electromagnetic compatibility (EMC) - Part 4-1: Testing and measurement techniques - Overview of IEC 61000-4 series	EN 61000-4-1	2007 ²⁾
IEC 61000-4-2	2008	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	2009
IEC 61000-4-3	2006	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	2006
+A1	2007		+A1	2008
+A2	2010		+A2	2010

¹⁾ Superseded by IEC/TR 61000-4-1:2016.

²⁾ Withdrawn publication.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-4	2012	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	2012
IEC 61000-4-5	2014	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	2014
IEC 61000-4-6	2013	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6	2014
IEC 61000-4-7	2002	Electromagnetic compatibility (EMC) - Part 4-7: Testing and measurement techniques - General guide on harmonics and interharmonics measurements and instrumentation, for power supply systems and equipment connected thereto	EN 61000-4-7	2002
+A1	2008		+A1	2009
IEC 61000-4-8	2009	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	EN 61000-4-8	2010
IEC 61000-4-9	1993	Electromagnetic compatibility (EMC) - Part 4-9: Testing and measurement techniques - Pulse magnetic field immunity test	EN 61000-4-9	1993 ³⁾
+A1	2000		+A1	2001 ³⁾
IEC 61000-4-10	1993 ⁴⁾	Electromagnetic compatibility (EMC) - Part 4-10: Testing and measurement techniques - Damped oscillatory magnetic field immunity test	EN 61000-4-10	1993
+A1	2000		+A1	2001
IEC 61000-4-11	2004	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	EN 61000-4-11	2004
IEC 61000-4-13	2002	Electromagnetic compatibility (EMC) - Part 4-13: Testing and measurement techniques - Harmonics and interharmonics including mains signaling at a.c. power port, low frequency immunity tests	EN 61000-4-13	2002
+A1	2009		+A1	2009

³⁾ Superseded by EN 61000-4-9:2016 (IEC 61000-4-9:2016): DOW = 2019-08-17.

⁴⁾ Superseded by IEC 61000-4-10:2016.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-16	1998	Electromagnetic compatibility (EMC) - Part 4-16: Testing and measurement techniques - Test for immunity to conducted, common mode disturbances in the frequency range 0 Hz to 150 kHz	EN 61000-4-16	1998 ⁵⁾
+A1	2001		+A1	2004
+A2	2009		+A2	2011
IEC 61000-4-18	2006	Electromagnetic compatibility (EMC) - Part 4-18: Testing and measurement techniques - Damped oscillatory wave immunity test	EN 61000-4-18 + corr. September	2007 2007
+A1	2010		+A1	2010
IEC 61000-4-29	2000	Electromagnetic compatibility (EMC) - Part 4-29: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations on d.c. input power port immunity tests	EN 61000-4-29	2000
IEC 61025	2006	Fault Tree Analysis (FTA)	EN 61025	2007
IEC 61076-2-101	2012	Connectors for electronic equipment - Product requirements - Part 2-101: Circular connectors - Detail specification for M12 connectors with screw-locking	EN 61076-2-101	2012
IEC/TS 61850-2	2003	Communication networks and systems in substations - Part 2: Glossary	-	-
IEC 61850-7-4	2010	Communication networks and systems for power utility automation - Part 7-4: Basic communication structure - Compatible logical node classes and data object classes	EN 61850-7-4	2010
IEC 61869-1 (mod)	2007	Instrument transformers - Part 1: General requirements	EN 61869-1	2009
IEC 61869-2	2012	Instrument transformers - Part 2: Additional requirements for current transformers	EN 61869-2	2012
IEC 61869-3	2011	Instrument transformers - Part 3: Additional requirements for inductive voltage transformers	EN 61869-3	2011
IEC/TR 61869-103	2012	Instrument transformers - The use of instrument transformers for power quality measurement	-	-
IEC 62271-100	2008	High-voltage switchgear and controlgear - Part 100: Alternating current circuit-breakers	EN 62271-100	2009
+A1	2012		+A1	2012
CISPR 11 (mod)	2015	Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement	EN 55011	2016

⁵⁾ Superseded by EN 61000-4-16:2016 (IEC 61000-4-16:2015): DOW = 2019-01-13.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO/IEC/IEEE 21451-4	2010	Information technology - Smart transducer - interface for sensors and actuators - Part 4: Mixed-mode communication protocols and Transducer Electronic Data Sheet (TEDS) formats		-

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