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STANDARDS  
Australia



# Instrument transformers

## Part 99: Glossary

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AS IEC 61869.99:2024

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- CIGRE Australia
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- Energy Networks Australia
- Engineers Australia
- National Association of Testing Authorities Australia
- National Measurement Institute
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# Instrument transformers

## Part 99: Glossary

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## Preface

This Standard was prepared by the Standards Australia Committee EL-013, Measurement and Protection Transformers.

The objective of this document is to contain the glossary of specific terminology and definitions used in the field of instrument transformers. Unless it is otherwise specified, in this document all periodic electrical quantities are understood to be RMS values.

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## INSTRUMENT TRANSFORMERS –

## Part 99: Glossary

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IEC 61869-99 has been prepared by IEC technical committee 38: Instrument Transformers. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
38/709/FDIS	38/711/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

A list of all parts in the IEC 61869 series, published under the general title *Instrument transformers*, can be found on the IEC website.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

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- amended.

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The contents of the corrigendum 1 (2023-01) have been included in this copy.

## INTRODUCTION

Definitions presented in this document are definitions related to the terminology of the IEC 61869 series and updated in terms of editorial and technical aspects according to the official decisions of TC 38 (38/619/Q and 38/626/RQ).

TC 38 decided to start this project to develop the IEC 61869-99 Glossary as preliminary work for revision of IEC 60050-321. The Glossary IEC 61869-99, when published, will be used as a basis for the update of IEC 60050-321.

Definitions that are listed in this document are valid definitions and should be used for terminology concerning instrument transformers.

The structure of this Glossary does not follow the order of product families but follows a logical order based on the hierarchy of concepts: starting from the most general concepts and continuing with the more specific ones.

For the purpose of better orientation in the arrangement of terminology it is useful to use the "Supporting document for IEC 61869-99" which is located at the following link:

[https://www.iec.ch/dyn/www/f?p=103:227:::FSP\\_ORG\\_ID:1241](https://www.iec.ch/dyn/www/f?p=103:227:::FSP_ORG_ID:1241)

## INSTRUMENT TRANSFORMERS –

### Part 99: Glossary

#### 1 Scope

This part of the IEC 61869 series contains the glossary of specific terminology and definitions used in the field of instrument transformers within the various parts of the series. Unless it is otherwise specified, in this document all periodic electrical quantities are understood to be RMS values.

#### 2 Normative references

There are no normative references in this document.

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

NOTE See Annex A for indexes of terms, abbreviated terms, and symbols.

##### 3.1 Basic terms and definitions

###### 3.1.1

###### **instrument transformer**

###### **IT**

device providing a secondary signal whose instantaneous value is substantially proportional to the instantaneous value of the primary voltage or current with a defined accuracy and intended to feed protective, metering or control equipment

###### 3.1.2

###### **current sensor**

###### **CS**

device providing a secondary signal whose instantaneous value is related to but not proportional to the instantaneous value of the primary current with a defined accuracy and intended to feed protective, metering or control equipment

EXAMPLE A Rogowski coil is an example of a current sensor.

###### 3.1.3

###### **primary circuit**

external circuit connected to the primary terminals

###### 3.1.4

###### **secondary circuit**

external circuit connected to the secondary terminals