

Transformadores de medida y protección

Normativa

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Principales normas IEC

- IEC 61869-1 Generalidades
- IEC 61869-2 Transformadores de corriente
- IEC 61869-3 Transformadores de voltaje inductivos
- IEC 61869-5 Transformadores de voltaje capacitivos

Normas IEC especiales

- IEC 61869-6 Additional general requirements for low-power instrument transformers
- IEC 61869-9 Instrument transformers. Digital interface for instrument transformers
- 61869-10 Additional requirements for low-power passive current transformers
- 61869-11 Additional requirements for low power passive voltage transformers
- IEC 61869-14 Instrument transformers. Additional requirements for current transformers for DC applications
- IEC 61869-15 Instrument transformers. Additional requirements for voltage transformers for DC applications

Normas IEC especiales

- IEC TR 61869-100:2017, Instrument transformers - Part 100: Guidance for application of current transformers in power system protection
 - It is applicable to inductive protective current transformers meeting the requirements of the IEC 61869-2 standard.
It may help relay manufacturers, CT manufacturers and project engineers to understand how a CT responds to simplified or standardized short circuit signals. Therefore, it supplies advanced information to comprehend the definition of inductive current transformers as well as their requirements.

Normas IEC especiales

- EC TR 61869-102:2014, Instrument transformers - Part 102: Ferroresonance oscillations in substations with inductive voltage transformers
 - provides technical information for understanding the undesirable phenomenon of ferroresonance oscillations in medium voltage and high voltage networks in connection with inductive voltage transformers. Ferroresonance can cause considerable damage to voltage transformers and other equipment. Ferroresonance oscillations may also occur with other non-linear inductive components

Normas IEC especiales

- IEC TR 61869-103:2012 Instrument transformers - The use of instrument transformers for power quality measurement
 - It is applicable to inductive and electronic instrument transformers for use with electrical measuring instruments for measurement and interpretation of results for power quality parameters in 50/60 Hz a.c. power supply systems. It gives guidance in the usage of HV instrument transformers for measuring the following **power quality parameters; power frequency, magnitude of the supply voltage and current, flicker, supply voltage dips and swells, voltage interruptions, transient voltages, supply voltage unbalance, voltage and current harmonics and interharmonics, mains signalling on the supply voltage and rapid voltage changes.**

Normas IEC especiales

- IEC 61850 series.

COMMUNICATION NETWORKS AND SYSTEMS FOR POWER UTILITY AUTOMATION –

Part 1: Introduction and overview

1 Scope

This technical report is applicable to *power utility automation systems* (PUAS). It defines the communication between intelligent electronic devices (IEDs) in such a system, and the related system requirements.

This part gives an introduction and overview of the IEC 61850 standard series. It refers to and might include text and figures coming from other parts of the IEC 61850 standard series.

Normas IEEE

- C57.13: General
- C57.13.1: Guide for Field Testing of Relaying Current Transformers
- C57.13.2: Standard Conformance Test Procedure for Instrument Transformers
- C57.13.3: Guide for Grounding of Instrument Transformer Secondary Circuits and Cases
- C57.13.5: Standard of Performance and Test Requirements for Instrument Transformers of a Nominal System Voltage of 115 kV and Above
- C57.13.6: Standard for High-Accuracy Instrument Transformers
- C57.13.7-2018 - IEEE Draft Standard for Current Transformers with a Maximum mA Secondary Current of 250mA

Normas IEEE

- IEEE Std C37.110-2007, Guide for the Application of Current Transformers Used for Protective Relaying Purposes
- IEEE Std C37.23-2007, Guide for the Application of Rogowski Coils Used for Protective Relaying Purposes

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