

IEEE Std 3004.1™ - 2013

IEEE Recommended Practice for the
Application of Instrument
Transformers in Industrial and
Commercial Power Systems



IEEE Recommended Practice for the Application of Instrument Transformers in Industrial and Commercial Power Systems

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Abstract: The selection and application of instrument transformers used in industrial and commercial power systems are covered in this recommended practice.

Keywords: CT, current transformer, IEEE 3004.1TM, instrument transformer, voltage transformer, VT

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This introduction is not part of IEEE Std 3004.1-2013, IEEE Recommended Practice for the Application of Instrument Transformers in Industrial and Commercial Power Systems.

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When this project is completed, the technical material in the thirteen IEEE Color Books will be included in a series of new standards—the most significant of which will be a new standard, IEEE Std 3000™, IEEE Recommended Practice for the Engineering of Industrial and Commercial Power Systems. The new standard will cover the fundamentals of planning, design, analysis, construction, installation, startup, operation, and maintenance of electrical systems in industrial and commercial facilities. Approximately 60 additional dot standards, organized into the following categories, will provide in-depth treatment of many of the topics introduced by IEEE Std 3000™:

- Power Systems Design (3001 series)
- Power Systems Analysis (3002 series)
- Power Systems Grounding (3003 series)
- Protection and Coordination (3004 series)
- Emergency, Standby Power, and Energy Management Systems (3005 series)
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In many cases, the material in a dot standard comes from a particular chapter of a particular IEEE Color Book. In other cases, material from several IEEE Color Books has been combined into a new dot standard.

The material in this recommended practice largely comes from IEEE Std 242™ (*IEEE Buff Book™*).

IEEE Std 3004.1™

This recommended practice covers the selection and application of instrument transformers used in industrial and commercial power systems.

Contents

1. Overview	1
1.1 Scope	1
2. Normative references.....	1
3. Definitions	2
4. Current transformers.....	3
4.1 Equivalent circuit for current transformers.....	3
4.2 Burden	5
4.3 Current transformer ratings and performance parameters	6
4.4 Accuracy ratings.....	9
4.5 Current transformer voltage and BIL ratings.....	13
4.6 Unusual service conditions	14
4.7 Current transformer construction.....	15
4.8 Current transformer connections	18
4.9 Current transformer application guide.....	22
5. Voltage (potential) transformers.....	26
5.1 Functional definition.....	26
5.2 Voltage transformer performance.....	26
5.3 Voltage transformer ratings and performance parameters	27
5.4 Voltage transformer construction	31
5.5 Voltage transformer connections.....	32
5.6 Voltage transformer application guide	34
Annex A (informative) Bibliography	36

IEEE Recommended Practice for the Application of Instrument Transformers in Industrial and Commercial Power Systems

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1. Overview

1.1 Scope

This recommended practice covers the selection and application of instrument transformers used in industrial and commercial power systems.

2. Normative references

The following referenced documents are indispensable for the application of this document (i.e., they must be understood and used, so each referenced document is cited in text and its relationship to this document is explained). For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments or corrigenda) applies.