

# IEEE Standard Requirements for Secondary Network Protectors

IEEE Power and Energy Society

Sponsored by the

Transformers Committee

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**IEEE Std C57.12.44™-2014**  
(Revision of  
IEEE Std C57.12.44-2005)



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# **IEEE Standard Requirements for Secondary Network Protectors**

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**Transformers Committee**  
of the  
**IEEE Power and Energy Society**

Approved 27 March 2014

**IEEE-SA Standards Board**

**Abstract:** The performance, electrical and mechanical interchangeability, and the safety of the equipment are covered. The proper selection of such equipment is established as a basis for use in this standard. Certain electrical, dimensional, and mechanical characteristics are described; and certain safety features of three-phase, 60 Hz, low-voltage (600 V and below) network protectors are taken into consideration. This equipment is used for automatically connecting and disconnecting a network transformer from a secondary spot or grid network.

**Keywords:** grid network, IEEE C57.12.44™, network, protector, spot network

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## Introduction

This introduction is not part of IEEE Std C57.12.44-2014, IEEE Standard for Requirements for Secondary Network Protectors.

This is the third revision of IEEE Std C57.12.44, which was originally published in 1994. The main purpose of this revision was to make changes as required to improve the standard. The revision officially started with IEEE Project Authorization Request approval on June 17, 2010. The revision was accomplished by the Standard Requirements for Secondary Network Protectors Working Group under the Underground Transformers and Network Protectors Subcommittee of the IEEE Power and Energy Society (PES) Transformers Committee.

A task force consisting of EEI, National Electrical Manufacturers Association (NEMA), and IEEE PES delegates developed the original document. The first working group meeting was held 24 February 1988, in Washington, DC. The document was completed in late 1994 by the Working Group on Requirements for Secondary Network Protectors under the Underground Transformers and Network Protectors Subcommittee of the IEEE PES Transformers Committee. R. B. Robertson chaired the Working Group during the preparation and balloting of the original standard.

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## 1. Overview

### 1.1 Scope

This standard describes the electrical, dimensional, and mechanical characteristics and takes into consideration the safety features of three-phase, 60 Hz, low-voltage (600 V and below) network protectors. They are used for automatically connecting and disconnecting a network transformer from a secondary spot or grid network.

### 1.2 Purpose

This standard is intended for use as a basis for establishing the performance, electrical and mechanical interchangeability, and safety of the equipment covered and to assist in the proper selection of such equipment.

### 1.3 Word usage

As used in this standard, the word “shall” indicates mandatory requirements. The words “should” and “may” refer to matters that are recommended and permissive, respectively, but not mandatory.