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IEEE Guide for Application of Shunt Power Capacitors

IEEE Power & Energy Society

Sponsored by the
Transmission and Distribution Committee

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Abstract: This guide applies to the use of 50 Hz and 60 Hz shunt power capacitor units rated 2400 Vac and above, and assemblies of such capacitors. Included are guidelines for the application, protection, and ratings of equipment for the safe and reliable utilization of shunt power capacitors. The guide is general and intended to be basic and supplemental to specific recommendations of the manufacturer. The guide covers applications that range from simple capacitor unit utilization to complex capacitor bank situations.
Keywords: capacitor, capacitor banks, externally fused, fuseless, internally fused, power factor correction, shunt power capacitors

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Introduction

This introduction is not part of IEEE Std 1036-2010, IEEE Guide for Application of Shunt Power Capacitors.

This standard was revised in response to a need created by changes in capacitor technology, primarily in the areas of internally fused and fuseless capacitors. In addition, capacitor application information previously contained in IEEE Std 18-2002[a] was moved to this application guide. It was also the aim of this revision to coordinate the information contained in this standard, whenever possible, with other pertinent national and international standards.

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[a] Information on references can be found in Clause 2.

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Participants

This standard was revised by a working group sponsored by the Capacitor Subcommittee of The Transmission and Distribution Committee of the IEEE Power Engineering Society. At the time this guide was submitted to the IEEE-SA Standards Board for approval, the Capacitor Subcommittee had the following membership:

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1. Scope

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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.