

IEEE Standard for Pad-Mounted Equipment—Enclosure Integrity

IEEE Power and Energy Society

Sponsored by the
Transformers Committee
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Transformers Committee
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IEEE Power and Energy Society

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IEEE-SA Standards Board

Abstract: Conformance tests and requirements for the integrity of above grade pad-mounted enclosures that contain apparatus energized in excess of 600 volts and that may be exposed to the public including, but not limited to, the following types of equipment enclosures: pad-mounted capacitors or inductors, pad-mounted distribution transformers, pad-mounted junction enclosures, pad-mounted metering equipment, pad-mounted switchgear, and pad-mounted voltage regulators are covered.

Keywords: enclosure integrity, IEEE C57.12.28™, pad-mounted equipment, transformers, switches

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Introduction

This introduction is not part of IEEE Std C57.12.28-2014, IEEE Standard for Pad-Mounted Equipment—Enclosure Integrity.

The IEEE Standards Committee on Transformers, Regulators, and Reactors, IEEE C57™, formerly developed and correlated standards on these products, together with the IEEE Standards Committee on Power Switchgear, IEEE C37™. The data used in this work have been gathered from many sources, including the standards of the Institute of Electrical and Electronics Engineers and the National Electrical Manufacturers Association, reports of committees of the Edison Electric Institute, and others.

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This standard was originally prepared by the Joint IEEE C57/IEEE C37 Working Group on Enclosures with Joseph Martin and then Robert C. Olen as chairman. This group is now the Enclosure Integrity Working Group of the IEEE Transformers Committee.

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1. Overview

1.1 Scope

This standard covers conformance tests and requirements for the integrity of above grade pad-mounted enclosures containing apparatus energized in excess of 600 V that may be exposed to the public including, but not limited to, the following types of equipment enclosures:

- Pad-mounted distribution transformers
- Pad-mounted capacitors or inductors
- Pad-mounted junction enclosures
- Pad-mounted metering equipment
- Pad-mounted switchgear
- Pad-mounted voltage regulators

This standard does not cover installations that are under the exclusive control of electric utilities and that are located in such a manner that access to the equipment is controlled exclusively by the utility.

1.2 Purpose

The purpose of this standard is to describe the requirements for a comprehensive integrity system for pad-mounted enclosures providing long field life with minimum maintenance and positive safety features.