

C57.12.28™

IEEE Standard for Pad-Mounted Equipment—Enclosure Integrity

IEEE Power Engineering Society

Sponsored by the
Transformers Committee



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IEEE Standard for Pad-Mounted Equipment—Enclosure Integrity

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Transformers Committee
of the
IEEE Power Engineering Society

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Abstract: Conformance tests and requirements for the integrity of above-grade pad-mounted enclosures that contain apparatus energized in excess of 600 V 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, and pad-mounted switch gear—are covered.

Keywords: enclosure integrity, pad-mounted equipment, switches, transformers

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Introduction

This introduction is not part of IEEE Std C57.12.28-2005, IEEE Standard for Pad-Mounted Equipment—Enclosure Integrity.

The Accredited Standards Committee on Transformers, Regulators, and Reactors, C57, has for a number of years been developing and correlating standards on these products. 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 C57/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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IEEE Standard for Pad-Mounted Equipment—Enclosure Integrity

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:

- a) Pad-mounted capacitors or inductors
- b) Pad-mounted distribution transformers
- c) Pad-mounted junction enclosures
- d) Pad-mounted metering equipment
- e) Pad-mounted switch gear

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.

2. Normative references

The following referenced documents are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments or corrigenda) applies.

ASTM B117, Standard Practice for Operating Salt Spray (Fog) Apparatus.¹

ASTM D523, Standard Test Method for Specular Gloss.

¹ASTM publications are available from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, USA (<http://www.astm.org/>).