

IEEE Standard for Pole-Mounted Equipment—Enclosure Integrity for Coastal Environments

IEEE Power and Energy Society

Developed by the
Transformers Committee
and the
Switchgear Committee

IEEE Std C57.12.30™-2020
(Revision of IEEE Std C57.12.30-2010)

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Transformers Committee
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IEEE SA Standards Board

Abstract: Conformance tests and requirements for the coating integrity of pole-mounted enclosures containing apparatus energized in excess of 600 V, and for application in coastal environments, are specified in this standard. These enclosures are typically located out of reach of the general public, and include, but are not limited to, the following types of equipment enclosures: pole-mounted distribution transformers, pole-mounted switches, pole-mounted regulators, pole-mounted metering equipment, pole-mounted reclosers, and pole-mounted switchgear.

Keywords: coating integrity, enclosure integrity, IEEE C57.12.30™, pole-mounted equipment, switches, transformers

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Introduction

This introduction is not part of IEEE Std C57.12.30-2020, IEEE Standard for Pole-Mounted Equipment—Enclosure Integrity for Coastal Environments.

The Accredited Standards Committee on Transformers, Regulators, and Reactors, C57, originally developed and correlated standards on these products, together with the Accredited Standards Committee on Power Switchgear, C37, through the Joint ASC C57/C37 Working Group on Enclosures with Joseph Martin and then with Robert C. Olen as chairman. This group is now the Enclosure Integrity Working Group of the IEEE Transformers Committee.

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.

In this revision of the guide a Word usage clause was added, additional definitions were added, and a new impact test was also added. Furthermore, the purpose of each test was clarified, and the standard was generally updated.

Contents

1. Overview	11
1.1 Scope	11
1.2 Purpose	11
1.3 Word usage	11
2. Normative references	12
3. Definitions	12
4. Enclosure design	14
4.1 Enclosure design requirements—Objective	14
4.2 Substrate requirements	14
5. Coating system requirements	17
5.1 General	17
5.2 Enclosure color	17
5.3 Coating system test specimens	17
5.4 Coating system performance requirements	20
6. General	22
6.1 Shipment	22
6.2 Coating repair procedure	23
6.3 Coating touch-up prior to shipment	23
Annex A (normative) Procedure for comparative weight loss	24
Annex B (informative) Bibliography	25

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1. Overview

1.1 Scope

This standard covers conformance tests and requirements for the enclosure integrity of pole-mounted electrical equipment intended for installations in coastal environments. These enclosures contain electrical apparatus energized in excess of 600 V, typically not accessible to the general public, including, but not limited to, the following types of equipment:

- a) Pole-mounted distribution transformers
- b) Pole-mounted switches
- c) Pole-mounted regulators
- d) Pole-mounted metering equipment
- e) Pole-mounted reclosers/sectionalizers
- f) Pole-mounted capacitors

1.2 Purpose

The purpose of this standard is to describe the requirements for a comprehensive enclosure integrity system for pole-mounted equipment providing long service life with minimum maintenance.

1.3 Word usage

The word *shall* indicates mandatory requirements strictly to be followed in order to conform to the standard and from which no deviation is permitted (*shall equals is required to*).^{1,2}

The word *should* indicates that among several possibilities one is recommended as particularly suitable, without mentioning or excluding others; or that a certain course of action is preferred but not necessarily required (*should equals is recommended that*).

¹The use of the word *must* is deprecated and cannot be used when stating mandatory requirements; *must* is used only to describe unavoidable situations.

²The use of *will* is deprecated and cannot be used when stating mandatory requirements; *will* is only used in statements of fact.