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# IEEE Standard Requirements for Subsurface, Vault, and Padmounted Load-Interrupter Switchgear and Fused Load-Interrupter Switchgear for Alternating Current Systems up to 38 kV

IEEE Power and Energy Society

Sponsored by the
Switchgear Committee

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**IEEE Std C37.74™-2014**
(Revision of
IEEE Std C37.74-2003)

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**IEEE-SA Standards Board**

**Abstract:** Required definitions, ratings, procedures for performing design tests and production tests, and construction requirements for subsurface, vault, and padmounted load-interrupter switchgear and fused load-interrupter switchgear for ac systems up to 38 kV are covered in this standard.

**Keywords:** design tests, fused, IEEE C37.74™, load-interrupter, padmount, padmounted, production tests, ratings, service conditions subsurface, switchgear, vault, way

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## Introduction

This introduction is for IEEE Std C37.74-2014, IEEE Standard for Subsurface, Vault, and Padmounted Load-Interrupter Switchgear and Fused Load-Interrupter Switchgear for Alternating Current Systems up to 38 kV.

This standard assigns an overall rating to the switchgear for the common ratings of dielectric withstand, peak withstand current, short-time withstand current, and fault-making current. The ratings for the switchgear are based on the minimum ratings of the components or ways. In addition, each way is assigned specific ratings reflecting its continuous current, and its specific load or fault interrupting current depending upon the components used in that way.

This standard also recognizes designs for equipment specifically intended for grounded-wye system applications, utilizing phase-to-ground rated devices for specific applications.

## Contents

# IEEE Standard Requirements for Subsurface, Vault, and Padmounted Load-Interrupter Switchgear and Fused Load-Interrupter Switchgear for Alternating Current Systems up to 38 kV



## 1. Scope

This standard applies to enclosed assemblies of single-phase and three-phase, dead-front and live-front, subsurface, vault, and padmounted, load-interrupter switches with or without protective devices such as fuses or fault interrupters, up to 38 kV rated maximum voltage.

## 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 referenced, the latest edition of the referenced document (including any amendments or corrigenda) applies.

IEC 60060-1, High-voltage test techniques. Part 1: General definitions and test requirements.[1]

[1]IEC publications are available from the Sales Department of the International Electrotechnical Commission, Case Postale 131, 3, rue de Varembé, CH-1211, Genève 20, Switzerland/Suisse (http://www.iec.ch/).