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IEEE Standard Requirements for Overhead, Pad-Mounted, Dry-Vault, and Submersible Automatic Line Sectionalizers for Alternating Current Systems Up to 38 kV

IEEE Power and Energy Society

Sponsored by the
Switchgear Committee

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Abstract: Required definitions, ratings, procedures for performing design tests and production tests, constructional requirements, and application considerations for overhead and pad-mounted, dry-vault, and submersible automatic line sectionalizers for ac systems are specified.
Keywords: automatic line sectionalizers, cutout type, dry-vault, IEEE C37.63™, pad-mounted, sectionalizers, submersible

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Introduction

This introduction is not part of IEEE Std C37.63-2013, IEEE Standard Requirements for Overhead, Pad-Mounted, Dry-Vault, and Submersible Automatic Line Sectionalizers for Alternating Current Systems Up to 38 kV.

This standard has been revised and updated from the 2005 revision of IEEE Std C37.63. This revision incorporates significant improvements that reflect the present state of the art in automatic line sectionalizers. These improvements include changes and additions in the following areas:

— The term *sectionalizer* has been restored to the definition in IEEE Std C37.100™.

— Replacing reference to IEEE Std 1247™-1998 by adopting reference to IEEE Std C37.100.1™ or by incorporating specifications within this document.

— Restricted fault-making current rating to devices that have independent manual operation, [illegible]5.102.

— General structure of the document has been made compatable with IEEE Std C37.[illegible]1.

— Revised limits of temperature and temperature rise to be consistent with common requirements IEEE Std C37.100.1 and the circuit breaker standard, IEEE Std C37.04™.

— Radio influence voltage test has been deleted.

— Partial discharge tests have been aligned with IEEE Std C37.60™-2012 (IEEE/IEC dual logo).

— Added ice loading tests.

Contents

IEEE Standard for Requirements for Overhead, Pad-Mounted, Dry-Vault, and Submersible Automatic Line Sectionalizers for Alternating Current Systems Up to 38 kV

1. Overview

1.1 Scope

This standard applies to all overhead, pad-mounted, dry-vault, and submersible single-pole or multipole alternating-current automatic line sectionalizers for rated maximum voltages above 1 kV and up to 38 kV. Voltages above 38 kV shall be considered special applications.

In order to simplify the terminology in this standard, the term *sectionalizer* has been substituted for *automatic line sectionalizer* wherever possible.

1.2 Purpose

The purpose of this standard is to describe the requirements for sectionalizers. Qualification to this standard should give reasonable assurance to the user that equipment meeting the requirements of this standard will perform in a satisfactory manner, provided that it has been properly selected for the intended application and is installed in accordance with the manufacturer's recommendations.