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Switchgear and controlgear and their assemblies for low-voltage - Energy efficiency

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1.Structure and Drafting Rules of Standardization Documents"

Drafting.

This document is equivalent to IEC TR63196.2020 (version 1.0) "Energy Efficiency of Low-Voltage Switchgear and Control Equipment and Complete Equipment", document

The file type was adjusted from IEC 's technical report to my country's guiding technical document.

Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents.

Introduction

Energy efficiency is a cross-cutting issue in the field of electrical engineering, which may take many forms across multiple disciplines and be addressed in standards for different products, processes and services.

reflected in.

Given the transversal nature of energy efficiency issues and their increasing integration with market products, processes and services, standards writers need to identify issues related to

Standardize relevant energy efficiency factors while.

* Use a systematic approach (see IEC Guide 119);

* Take a systems approach.

The goal of an energy efficiency management system is to continuously improve the energy performance of energy-using systems such as production equipment or buildings. As

shown in Figure 1, it is based on

Based on the energy policy and goals of a specific organization, goals are achieved through a series of processes (planning, operations, evaluation, etc.).

Figure 1 Overview of energy efficiency management

In the entire energy efficiency system, a variety of equipment including switchgear and control equipment and their complete sets of equipment (shown in the light gray box in Figure 1) play an important role.

To work.

This document is intended to provide product standards writers and other stakeholders with information on switchgear and controlgear and their complete sets.

Guidance on how to consider efficiency.

Product standards writers are encouraged through this document to.

* Consider energy efficiency elements in their product standards and related publications;

* Use a structured approach;

* Use a systems approach;

* Support the spread of energy efficiency technologies;

* Accelerate the application of next-generation energy efficiency technologies;

* Create prerequisites for increasing energy efficiency through technology.

Low voltage switchgear and control equipment and

The energy efficiency of its complete equipment

1 Scope

This document specifies switchgear and controlgear in accordance with IEC Guide 119 (see all parts of IEC 60947, IEC 61095 and

IEC 62626 all parts) and its complete equipment (see IEC 61439 all parts) under the system's energy efficiency. This document refers to the Energy Policy

Elements, products and system elements.

This document typically assumes electrical energy as the input, while the output can be various products and/or services.

This document can.

---Help coordinate energy efficiency requirements and guidance in product standards;

--- Increase awareness of energy efficiency, because the regulations in the publication will affect energy efficiency;

---Helps identify energy efficiency factors;

--- Promote the use of systems approaches to energy efficiency.

Apart from energy efficiency, this document does not cover environmental issues (see IEC TS63058).

2 Normative reference documents

This document has no normative references.

3 Terms and definitions

The following defined terms and definitions apply to this document.

The ISO and IEC standard terminology database addresses are as follows.

3.1

energy managementenergymanagement

Coordinated activities that direct and control an entity's energy use.

3.2

EnMS

A set of interrelated or interacting elements used to establish an energy policy, energy goals, processes and procedures to achieve those energy goals.

collection of elements.

[Source. ISO 50001.2011,3.9]

3.3

energyefficiency

EE

When considering driving parameters and boundaries, the ratio or other quantitative relationship between the output performance, service, product or energy and the input energy.

NOTE. Inputs and outputs are both qualitatively and quantitatively specified and can be measured.