

## DRAFT TANZANIA STANDARD

(Draft for comments only)

Insulation coordination for equipment within low-voltage supply systems - Part 1: Principles, requirements and tests

# **TANZANIA BUREAU OF STANDARDS**

#### **0 National Foreword**

This draft Tanzania Standard is being prepared by the ELV and Energy Storage Technical Committee, under the supervision of the Electrical Engineering Divisional Standards Committee (EEDC)

This draft Tanzania Standard is an adoption of the International Standard *IEC 60664-1:2020, Insulation coordination for equipment within low-voltage supply systems - Part 1: Principles, requirements and tests* which has been prepared by the International Electrotechnical Commission (IEC).

## **Terminology and conventions**

Some terminologies and certain conventions are not identical with those used in Tanzania Standards; Attention is drawn especially to the following:

- 1) The comma has been used as a decimal marker for metric dimensions. In Tanzania Standards, it is current practice to use "full point" on the baseline as the decimal marker.
- 2) Where the words "International Standard(s)" appear, referring to this standard they should read "Tanzania Standard(s)".

## 1 Scope

This draft Tanzania standard deals with insulation coordination for equipment having a rated voltage up to AC 1 000 V or DC 1 500 V connected to low-voltage supply systems.

This document applies to frequencies up to 30 kHz. It applies to equipment for use up to 2 000 m above sea level and provides guidance for use at higher altitudes. It provides requirements for technical committees to determine clearances, creepage distances and criteria for solid insulation.

It includes methods of electrical testing with respect to insulation coordination. The minimum clearances specified in this document do not apply where ionized gases are present.

Special requirements for such situations can be specified at the discretion of the relevant technical committee. This document does not deal with distances:

- through liquid insulation;
- through gases other than air;
- through compressed air.