

## DRAFT TANZANIA STANDARD

## (Draft for comments only)

Shunt power capacitors of the self-healing type for a.c. systems having a rated voltage up to and including 1 000 V - Part 1: General - Performance, testing and rating - Safety requirements - Guide for installation and operation

TANZANIA BUREAU OF STANDARDS



## 1 National Foreword

This draft Tanzania Standard has been prepared by the TBS Electrical Equipment Technical Committee, under the supervision of the Electrotechnical Divisional Standards Committee (EDC)

This draft Tanzania Standard is identical to International Standard **IEC 60831-1:2014** Shunt power capacitors of the self-healing type for a.c. systems having a rated voltage up to and including 1 000 V - Part 1: General - Performance, testing and rating - Safety requirements - Guide for installation and operation, which has been prepared by the International Electrotechnical Commission.

## 2 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)"



SHUNT POWER CAPACITORS OF THE SELF-HEALING TYPE FOR A.C. SYSTEMS HAVING A RATED VOLTAGE UP TO AND INCLUDING 1 000 V -Part 1: General – Performance, testing and rating – Safety requirements - Guide for installation and operation Section 1: General 1 Scope and object This part of the IEC 60831 series is applicable to both capacitor units and capacitor banks intended to be used, particularly, for power-factor correction of a.c. power systems having a rated voltage up to and including 1 000 V and frequencies of 15 Hz to 60 Hz. This part of IEC 60831 also applies to capacitors intended for use in power filter circuits. Additional definitions, requirements, and tests for power filter capacitors are given in Annex A. The following capacitors are excluded from this part of IEC 60831: Shunt power capacitors of the non-self-healing type for a.c. systems having a rated voltage up to and including 1 000 V (IEC 60931-1, -2 and -3). - Shunt capacitors for a.c. power systems having a rated voltage above 1 000 V (IEC 60871-1, -2, -3 and -4). - Capacitors for inductive heat-generating plants operating at frequencies between 40 Hz and 24 000 Hz (IEC 60110-1 and -2). - Series capacitors (IEC60143-1, -2, -3 and -4). -AC motor capacitors (IEC 60252-1 and -2). Coupling capacitors and capacitor dividers (IEC 60358-1). - Capacitors for power electronic circuits (IEC 61071). Small a.c. capacitors to be used for fluorescent and discharge lamps (IEC 61048 and IEC 61049). Capacitors for suppression of radio interference (under consideration).

- Capacitors intended to be used in various types of electrical equipment, and thus

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ared as components.

tors intended for use with d.c. voltage superimposed on the a.c. voltage.

Accessories such as insulators, switches, instrument transformers, fuses, etc., should be in

accordance with the relevant IEC standards and are not covered by the scope of this part of

IEC 60831.

The object of this part of IEC 60831 is to:

a) formulate uniform rules regarding performances, testing and rating;

b) formulate specific safety rules;

c) provide a guide for installation and operation.