General statement

The Trinidad and Tobago Bureau of Standards (the Bureau) is a body corporate established under the authority of the Standards Act No. 18 of 1997 (herein after referred to as the Standards Act).

In accordance with the Standards Act, the Bureau shall promote and encourage the development and maintenance of standards and further shall establish standards for the following: to improve goods produced or used in Trinidad and Tobago; to ensure industrial efficiency and development; to promote public and industrial welfare, health and safety; and to protect the environment.

The Bureau develops standards through consultation with relevant interest groups, and public comment is invited on all draft standards before they are declared as Trinidad and Tobago Standards in accordance with the provisions of the Standards Act.

The Bureau is the legal custodian of Trinidad and Tobago Standard Marks, which are issued in accordance with the Standards Act. When a Trinidad and Tobago Standard Mark appears on any product, or in connection with any service, process or practice, it provides assurance that such a product, service, process or practice conforms to a Trinidad and Tobago Standard.

The Bureau’s Standards Information Centre maintains a reference library of standards, including local, regional and international standards and is the national node of the International Organization for Standardization Information Network (ISONET). The Centre serves as the WTO/TBT Enquiry Point which disseminates information on standards and technical regulations as it relates to the World Trade Organization, Technical Barriers to Trade Agreement. It also acts as the sales agent for the publications of foreign and international standards organizations.

NOTE In order to keep abreast of progress in the industries concerned, Trinidad and Tobago Standards are subject to periodic review. Suggestions for improvements are welcome.
**Committee**

The Committee responsible for the formulation of this Trinidad and Tobago Standard is as follows:

**NATIONAL TECHNICAL COMMITTEE – ELECTRICAL CODES**

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<tr>
<th>Member</th>
<th>Representing</th>
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<tr>
<td>Mr John Phillip</td>
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<td>Mr Ansarie Ali</td>
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PCTTS 650:20XX

Foreword

This specification was declared a Trinidad and Tobago Standard on …., after the draft finalized by the National Technical Committee – Electrical Codes, had been approved by the Bureau.

This standard is a modified adoption of BS EN 50525-2-31:2011, Electric cables – Low voltage energy cables of rated voltages up to and including 450/750 V (Uo/U), Part 2-31: Cables for general applications – Single core non-sheathed cables with thermoplastic PVC insulation. This standard should be read in conjunction with BS EN 50525-2-31:2011.

The adoption of the most recent version of BS EN 50525-2-31:2011 was necessary to bring the national standards for electric cables in line with the new developments in cable technology.

Based on the recommendation of the Trinidad and Tobago Bureau of Standards, the Minister responsible for trade and industry has accorded compulsory status to this standard for the following reasons:

a) to protect the consumer or user against danger to health or safety;

b) to protect public or industrial health, welfare or safety; and

c) to ensure acceptable product quality.

This standard became effective as a compulsory standard via a Compulsory Standards Order published in the Trinidad and Tobago Gazette, as required by the Standards Act.

This standard is intended for use by a wide range of stakeholders including:

1. Manufacturers – in the production process;
2. Importers – in sourcing products for purchase;
3. Designer engineers – in specifying cables for projects;
4. Contractors – in electrical installation;
5. Regulatory agencies – as a basis for assessing imported or locally manufactured products within an established regulatory or legal framework; and
6. Conformity assessment (including certification) bodies – as a basis for conformity assessment activities.
1 Scope

This standard applies to non-sheathed single core cables insulated with thermoplastic (PVC) insulation.

The cables are of rated voltages $U_o/U$ up to and including 450/750 V.

The cables are intended for fixed wiring applications.

NOTE 1 A cable rated 450/750 V may be used at 600/100 V when this cable is used in fixed installations with mechanical protection, within special and control gear – see EN 50565-1:2014 and EN 50565-2:2014.

The maximum conductor operating temperatures for the cables in this standard are 70ºC (V types) and 90 ºC (V2 types).


2 Normative references

The following referenced document are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references the latest editions shall apply.

British Standards Institution (BSI)

BS EN 50525-2-31:2011, Electric cables – Low voltage energy cables of rated voltages up to and including 450/750 V ($U_o/U$) - Part 2-31: Cables for general applications - Single core non-sheathed cables with thermoplastic PVC insulation.

European Committee for Electrotechnical Standardization (CENELEC)

EN 50525-1, Electric cables – Low voltage energy cables of rated voltages up to and including 450/750 V ($U_o/U$) – Part 1: General requirements


3 Terms and definitions

For the purposes of this standard, the terms and definitions given in BS EN 50525-2-31:2011 and EN 50525-1 and the following terms and definitions apply.

3.1 attestation
issue of a statement, based on a decision following review, that fulfilment of specified requirements has been demonstrated

3.2 certification
third-party attestation related to products, processes, systems or persons

3.3 compliance
adherence to the requirements specified in this standard

3.4 conformity assessment
demonstration that specified requirements relating to a product, process, system, person or body are fulfilled

3.5 inspection
examination of a product design, product, process, service or installation or their design and determination of its conformity with specific requirements or, on the basis of professional judgement, with general requirements

3.6 product certification
third-party attestation related to products

3.7 product certification mark
protected mark issued by a body performing third-party conformity assessment, indicating that a product is in conformity with specified requirements

3.8 regulatory agency
a government body formed or mandated under the terms of a legislative Act to ensure compliance with the provisions of the Act and in carrying out its purpose

4 Specification

Electric cables of the types specified in the Scope, shall comply with the requirements of BS EN 50525-2-31, with the following modification:

- Throughout text, replace the decimal comma with the decimal point.
5 Compliance

5.1 In order to demonstrate compliance, electric cables shall be accompanied by a certification mark which is acceptable to the Trinidad and Tobago Bureau of Standards.

5.2 In the event that electric cables of similar types, are manufactured to a standard different to BS EN 50525-2-31, both the standard and the certification mark shall be acceptable to the Trinidad and Tobago Bureau of Standards.

5.3 The Trinidad and Tobago Bureau of Standards, at its discretion, shall conduct inspection and certification activities to verify compliance, inclusive of sampling and testing.