

# INTERNATIONAL STANDARD

**Halogen-free thermoplastic insulated and sheathed flexible cables of rated  
voltages up to and including 300/300 V –  
Part 2: Test methods**



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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HALOGEN-FREE THERMOPLASTIC  
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OF RATED VOLTAGES UP TO AND INCLUDING 300/300 V –****Part 2: Test methods****FOREWORD**

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International Standard IEC 63010-2 has been prepared by IEC technical committee 20: Electric cables.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
20/1759/FDIS	20/1776/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 63010 series, published under the general title *Halogen-free thermoplastic insulated and sheathed flexible cables of rated voltages up to and including 300/300 V*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

# HALOGEN-FREE THERMOPLASTIC INSULATED AND SHEATHED FLEXIBLE CABLES OF RATED VOLTAGES UP TO AND INCLUDING 300/300 V –

## Part 2: Test methods

### 1 Scope

This part of IEC 63010 specifies test methods that are particular for cables with insulation and sheath based on halogen-free thermoplastic compounds having rated voltage up to and including 300/300 V for use with small devices and for short connections to desktop electrical appliances where flexibility is of prime importance.

General requirements and cable types are specified in IEC 63010-1.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60811-501, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 501: Mechanical tests – Tests for determining the mechanical properties of insulating and sheathing compounds*

IEC 62230, *Electric cables – Spark-test method*

IEC 63010-1:2017, *Electric cables – Halogen-free thermoplastic insulated and sheathed cables of rated voltage up to and including 300/300 V – Part 1: General requirements and cables*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 63010-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

### 4 General requirements

#### 4.1 Pre-conditioning

All the tests shall be carried out not less than 16 h after the extrusion of the insulating or sheathing compounds.

#### 4.2 Test temperature

Unless otherwise specified, tests shall be carried out at an ambient temperature of  $(20 \pm 5) ^\circ\text{C}$ .