

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Electric cables – Halogen-free, low smoke, thermoplastic insulated and sheathed cables of rated voltages up to and including 450/750 V –
Part 2: Test methods**

**Câbles électriques – Câbles à isolation et gaine thermoplastique sans halogène à faible dégagement de fumée, de tension assignée au plus égale à 450/750 V –
Partie 2: Méthodes d'essais**



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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 29.060.20

ISBN 978-2-8322-2253-9

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRIC CABLES – HALOGEN-FREE, LOW SMOKE, THERMOPLASTIC
INSULATED AND SHEATHED CABLES OF RATED VOLTAGES UP TO AND
INCLUDING 450/750 V –****Part 2: Test methods****FOREWORD**

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International Standard IEC 62821-2 has been prepared by IEC technical committee 20: Electric cables.

The text of this standard is based on the following documents:

FDIS	Report on voting
20/1553/FDIS	20/1566/RVD

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

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

A list of all parts in the IEC 62821 series, published under the general title, *Electric cables – Halogen-free, low smoke, thermoplastic insulated and sheathed cables of rated voltages up to and including 450/750 V*, can be found on the IEC website.

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

- reconfirmed,
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ELECTRIC CABLES – HALOGEN-FREE, LOW SMOKE, THERMOPLASTIC INSULATED AND SHEATHED CABLES OF RATED VOLTAGES UP TO AND INCLUDING 450/750 V –

Part 2: Test methods

1 Scope

This part of IEC 62821 specifies test methods which are particular for cables with insulation, and sheath based on halogen-free, thermoplastic compound, and having low emission of smoke and corrosive gases when exposed to fire, of rated voltages U_0/U up to and including 450/750 V a.c.

General requirements are specified in IEC 62821-1 and particular types of flexible cables are specified in IEC 62821-3.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 62821-1, *Electric cables – Halogen-free low smoke, thermoplastic insulated and sheathed cables of rated voltages up to and including 450/750 V – Part 1: General requirements*

IEC 62821-3, *Electric cables – Halogen-free low smoke thermoplastic insulated and sheathed cables of rated voltage up to and including 450/750 V – Part 3: Flexible cables (cords)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62821-1 apply.

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 made at an ambient temperature of $(20 \pm 15) ^\circ\text{C}$.