National Standards Authority of Ireland

IRISH STANDARD

I.S. 202:Part 7:2003

ICS 29.060.20

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CABLES OF RATED VOLTAGES UP TO AND INCLUDING 450/750V AND HAVING CROSS-LINKED INSULATION

PART 7: CABLES WITH INCREASED HEAT RESISTANCE FOR INTERNAL WIRING FOR A CONDUCTOR TEMPERATURE OF 110°C

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Údarás um Chaighdeáin Náisiúnta na hÉireann

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DECLARATION

OF

SPECIFICATION

ENTITLED

CABLES OF RATED VOLTAGES UP TO AND INCLUDING 450/750V AND HAVING CROSS-LINKED INSULATION

PART 7: CABLES WITH INCREASED HEAT RESISTANCE FOR INTERNAL WIRING FOR A CONDUCTOR TEMPERATURE OF 110 °C

AS

THE IRISH STANDARD SPECIFICATION FOR

CABLES OF RATED VOLTAGES UP TO AND INCLUDING 450/750V AND HAVING CROSS-LINKED INSULATION

PART 7: CABLES WITH INCREASED HEAT RESISTANCE FOR INTERNAL WIRING FOR A CONDUCTOR TEMPERATURE OF 110 °C

NSAI in exercise of the power conferred by section 16 (5) of the National Standards Authority of Ireland Act, 1996 (No. 28 of 1996) and with the consent of the Minister for Enterprise Trade and Employment, hereby declares as follows:

1. This instrument may be cited as the Standard Specification (Cables of Rated Voltages up to and including 450/750V and having cross-linked insulation Part 7: Cables with increased heat resistance for internal wiring for a conductor temperature of 110°C) Declaration, 2003.

2. (1) The Specification set forth in the Schedule to this declaration is hereby declared to be the standard specification for Cables of Rated Voltages up to and including 450/750V and having cross-linked insulation Part 7: Cables with increased heat resistance for internal wiring for a conductor temperature of 110°C.

   (2) The said standard specification maybe cited as Irish Standard 202:Part 7:2003 or as I.S. 202:Part 7:2003.

3. (1) The Standard Specification, (Rubber Insulated Cable and Flexible Cords of Rated Voltage up to and including 450/750V) Declaration 1989, is hereby revoked.

   (2) Reference in any other standard specification to the Instrument hereby revoked and to Irish Standard 202:1989 thereby prescribed, shall be construed, respectively, as references to this Instrument and to Irish Standard 202:2003.

FOREWORD

The Irish Standard Specification I.S. 202:Part 7:2003, was prepared by the National Standards Authority of Ireland on the basis of a submission from Technical Committee No. 14 which is a Technical Subcommittee of the Electro-Technical Council of Ireland. The ETCI is the national body responsible for the harmonization of standards in the field of electro-technology and represents Ireland in IEC and CENELEC.

I.S. 202 now has the following parts:

I.S. 202: Part 1 - General requirements
I.S. 202: Part 2 - Test methods
I.S. 202: Part 3 - Heat resistant silicone rubber insulated cables
I.S. 202: Part 4 - Cords and flexible cables
I.S. 202: Part 5 - (Spare)
I.S. 202: Part 6 - Arc welding cables
I.S. 202: Part 7 - Cables with increased heat resistance for internal wiring for a conductor temperature of 110°C
I.S. 202: Part 8 - Polychloroprene or equivalent synthetic elastomer sheathed cable for use as decorative chains
I.S. 202: Part 9 - Single core non-sheathed cables for fixed wiring having low emission of smoke and corrosive gases
I.S. 202: Part 10 - EPR insulated and polyurethane sheathed flexible cables
I.S. 202: Part 11 - EVA cords and flexible cables
I.S. 202: Part 12 - Heat resistant EPR cords and flexible cables
I.S. 202: Part 13 - Single and multicore flexible cables, insulated and sheathed with crosslinked compound and having low emission of smoke and corrosive gases
I.S. 202: Part 14 - Cords for applications requiring high flexibility
I.S. 202:.Part 15 - Multicore cables insulated and shielded with heat-resistant silicone rubber
I.S. 202: Part 16 - Water resistant polychloroprene or equivalent synthetic elastomer sheathed cables

In order that this revision of Part 7 of I.S. 202 does not introduce unnecessary changes to long-established clause numbers, the Normative References (which would otherwise be inserted as clause 2) are given in Annex A.

Schedule

Cables of Rated Voltages up to and including 450/750V and having cross-linked insulation and having cross-linked insulation

Part 7 : Cables with increased heat resistance for internal wiring for a conductor temperature of 110°C

1. Scope

This Part 7 of the Standard details the particular specifications for rubber insulated cables of rated voltages U_o/U up to and including 450/750V for internal wiring of electrical apparatus where wiring is operated in a high temperature zone. The high temperature may be caused by high ambient temperature and/or by heat generated by the equipment.

The cables shall comply with the appropriate requirements given in Part 1 and the particular requirements of this Part.

NOTE: The overall dimensions of the cables of this Part of I.S. 202 have been calculated in accordance with I.S. EN 60719

2. Cable with increased heat resistance for internal wiring for a conductor temperature of 110°C (450/750V)

2.1 Code designation

H07G-U with solid conductor
H07G-R with stranded conductor
H07G-K with flexible conductor

2.2 Rated voltage

450/750V

2.3 Construction

2.3.1 Conductor

Number of Conductors: 1
The conductor shall comply with the requirements given in I.S. 270:
Class 1 for solid conductors
Class 2 for stranded conductors
Class 5 for flexible conductors

The wires may be plain or tinned.

2.3.2 Separator

A separator of suitable material shall be applied around each conductor if the conductors are plain. If the conductors are tinned the use of a separator is optional.

2.3.3 Insulation

The insulation shall be rubber compound of the type EI 3, applied around the conductor.

The insulation thickness shall comply with the specified value given in Table I, column 3 of this Part.

The insulation resistance shall be not less than the value given in Table I, column 6 of this Part.