SLOVENSKI STANDARD
SIST EN 60317-53:2001

01-september-2001

Specifications for particular types of winding wires - Part 53: Aromatic polyamide (aramid) tape wrapped rectangular copper wire, temperature index 220

Specifications for particular types of winding wires -- Part 53: Aromatic polyamide (aramid) tape wrapped rectangular copper wire, temperature index 220

Technische Lieferbedingungen für bestimmte Typen von Wickeldrähten -- Teil 53: Flachdrähte aus Kupfer, lackisoliert mit aromatischen Polyamiden, Klasse 220

Spécifications pour types particuliers de fils de bobinage -- Partie 53: Fil de section rectangulaire en cuivre enveloppé par un ruban polyamide aromatique (aramide), d'indice de température 220

Ta slovenski standard je istoveten z: **EN 60317-53:1999**

ICS:

29.060.10 Žice Wires

SIST EN 60317-53:2001 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60317-53

August 1999

ICS 29.060.10

English version

Specifications for particular types of winding wires Part 53: Aromatic polyamide (aramid) tape wrapped rectangular copper wire, temperature index 220 (IEC 60317-53:1999)

Spécifications pour types particuliers de fils de bobinage
Partie 53: Fil de section rectangulaire en cuivre enveloppé par un ruban polyamide aromatique (aramide), d'indice de température 220
(CEI 60317-53:1999)

Technische Lieferbedingungen für bestimmte Typen von Wickeldrähten
Teil 53: Flachdrähte aus Kupfer, lackisoliert mit aromatischen Polyamiden, Klasse 220
(IEC 60317-53:1999)

This European Standard was approved by CENELEC on 1999-08-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 55/665/FDIS, future edition 1 of IEC 60317-53, prepared by IEC TC 55, Winding wires, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60317-53 on 1999-08-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2000-05-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2002-08-01

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given for information only.
In this standard, annex ZA is normative and annex A is informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60317-53:1999 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60172	1987	Test procedure for the determination of the temperature index of enamelled winding wires	EN 60172	1994
IEC 60317-0-2	1997	Specifications for particular types of winding wires Part 0: General requirements Section 2: Enamelled rectangular copper wire	EN 60317-0-2	1998
IEC 60819-3-3	1991	Specification for non-cellulosic papers for electrical purposes Part 3: Specifications for individual materials Sheet 3: Unfilled aramid (aromatic polyamide papers)	-	-
IEC 60851	series	Winding wires - Test methods	EN 60851	series
ISO 3	1973	Preferred numbers - Series of preferred numbers	-	-

NORME INTERNATIONALE

INTERNATIONAL STANDARD

CEI
IEC
60317-53

Première édition
First edition
1999-04

Spécifications pour types particuliers de fils de bobinage –

Partie 53: Fil de section rectangulaire en cuivre enveloppé par un ruban polyamide aromatique (aramide), d'indice de température 220

Specifications for particular types of winding wires –

Part 53: Aromatic polyamide (aramid) tape wrapped rectangular copper wire, temperature index 220

International Electrotechnical Commission 3, rue de Varembé Geneva, Switzerland
Telefax: +41 22 919 0300 e-mail: inmail@iec.ch IEC web site http: //www.iec.ch

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE S

Pour prix, voir catalogue en vigueur
For price, see current catalogue

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 53: Aromatic polyamide (aramid) tape wrapped rectangular copper wire, temperature index 220

FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60317-53 has been prepared by IEC technical committee 55: Winding wires.

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

FDIS	Report on voting
55/665/FDIS	55/685/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.

Annex A is for information only.

INTRODUCTION

This part of IEC 60317 forms an element of a series of standards which deals with insulated wires used for windings in electrical equipment. The series has three groups describing:

1) methods of test (IEC 60851);
2) specifications (IEC 60317);
3) packaging (IEC 60264).

SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 53: Aromatic polyamide (aramid) tape wrapped rectangular copper wire, temperature index 220

1 Scope

This part of IEC 60317 specifies requirements for tape wrapped rectangular copper winding wire of temperature index 220. The insulation consists of one or more wrappings of aromatic polyamide (aramid) tape of various thicknesses.

NOTE – For this type of wire, the heat shock test is inappropriate and therefore a heat shock temperature cannot be established. Consequently, a class based on the requirements for temperature index and heat shock temperature cannot be specified.

The temperature in degrees Celsius corresponding to the temperature index is not necessarily that at which the wire is recommended to be operated and this will depend on many factors, including the types of equipment involved.

The range of nominal conductor sizes covered by this standard is:

- width: min. 2,00 mm max. 16,00 mm;
- thickness: min. 0,80 mm max. 5,60 mm.

The specified combinations of width and thickness as well as the specified ratio width/thickness are given in table 1.

When reference is made to winding wire according to this standard, the following information should be given:

- reference to IEC 60317-53;
- dimensions of the conductor;
- reference should also be made to the number and thickness of the papers used and to the degree of overlap, as agreed between purchaser and supplier.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60317. For dated references subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 60317 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60172:1987, *Test procedure for the determination of the temperature index of enamelled winding wires*

IEC 60317-0-2:1997, *Specifications for particular types of winding wires – Part 0: General requirements – Section 2: Enamelled rectangular copper wire*