



SLOVENSKI STANDARD
oSIST prEN 60317-73:2017
01-september-2017

Specifikacije za posebne vrste navijalnih žic - 73. del: Aluminijasta žica s pravokotnim prerezom, emajlirana s poliamidimidom, prekrita s poliestrom ali poliesterimidom, razred 200

Specifications for particular types of winding wires - Part 73: Polyester or polyesterimide overcoated with polyamide-imide enamelled rectangular aluminium wire, class 200

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SECRETARIAT: United States of America	SECRETARY: Mr Mike Leibowitz
OF INTEREST TO THE FOLLOWING COMMITTEES: TC 2, TC 14	PROPOSED HORIZONTAL STANDARD: <input type="checkbox"/> Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.
FUNCTIONS CONCERNED: <input type="checkbox"/> EMC <input type="checkbox"/> ENVIRONMENT <input checked="" type="checkbox"/> QUALITY ASSURANCE <input checked="" type="checkbox"/> SAFETY	
<input checked="" type="checkbox"/> SUBMITTED FOR CENELEC PARALLEL VOTING Attention IEC-CENELEC parallel voting The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting. The CENELEC members are invited to vote through the CENELEC online voting system.	<input type="checkbox"/> NOT SUBMITTED FOR CENELEC PARALLEL VOTING

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TITLE:

Specifications for particular types of winding wires - Part 73: Polyester or polyesterimide overcoated with polyamide-imide enamelled rectangular aluminium wire, class 200

NOTE FROM TC/SC OFFICERS:

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SPECIFICATIONS FOR PARTICULAR TYPES
OF WINDING WIRES –**
**Part 73: Polyester or polyesterimide overcoated with polyamide-imide
enamelled rectangular aluminium wire, class 200**

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International Standard IEC 60317-74 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
XX/XX/FDIS	XX/XX/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.

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

- 94 • reconfirmed,
- 95 • withdrawn,
- 96 • replaced by a revised edition, or
- 97 • amended.

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99 The National Committees are requested to note that for this publication the stability date
100 is 2021.

101 THIS TEXT IS INCLUDED FOR THE INFORMATION OF THE NATIONAL COMMITTEES AND WILL BE DELETED
102 AT THE PUBLICATION STAGE.

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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) *Winding wires – Test methods* (IEC 60851 series);
- 2) *Specifications for particular types of winding wires* (IEC 60317 series);
- 3) *Packaging of winding wires* (IEC 60264 series).

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SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 73: Polyester or polyesterimide overcoated with polyamide-imide enamelled rectangular aluminium wire, class 200

1 Scope

This part of IEC 60317 specifies the requirements of enamelled rectangular aluminium winding wire of class 200 with a dual coating. The underlying coating is based on polyester or polyesterimide resin, which may be modified providing it retains the chemical identity of the original resin and meets all specified wire requirements. The superimposed coating is based on polyamide-imide resin.

NOTE A modified resin is a resin that has undergone a chemical change, or contains one or more additives to enhance certain performance or application characteristics.

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

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

Wires of grade 1 and grade 2 are included in this specification and apply to the complete range of conductors.

The specified combinations of width and thickness as well as the specified width/thickness ratio are given in IEC 60317-0-9:2015.

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 60317-0-9:2015, *Specifications for particular types of winding wires – Part 0-9: General requirements – Enamelled rectangular aluminium wire.*

3 Definitions and general notes on methods of test and appearance

3.1 Terms and definitions

Subclause 3.1 of IEC 60317-0-9:2015 applies

3.2 General notes

3.2.1 Methods of test

In case of inconsistencies between IEC 60317-0-9 and this standard, IEC 60317-73 shall prevail.

3.2.2 Winding wire

Class 200 is a thermal class that requires a minimum temperature index of 200 and a heat shock temperature of at least 220 °C.

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

3.3 Appearance

Clause 3.3 of IEC 60317-0-9:2015 applies.

164 **4 Dimensions**

165 Clause 4 of IEC 60317-0-9:2015 applies.

166 **5 Electrical resistance**

167 Clause 5 of IEC 60317-0-9:2015 applies.

168 **6 Elongation**

169 Clause 6 of IEC 60317-0-9:2015 applies.

170 **7 Springiness**

171 Test appropriate but no requirements specified.

172 **8 Flexibility and adherence**

173 Clause 8 of IEC 60317-0-9:2015 applies.

174 **9 Heat shock**

175 Clause 9 of IEC 60317-0-9:2015 applies. The minimum heat shock temperature shall be 220
176 °C.

177 **10 Cut-through**

178 Test inappropriate.

179 **11 Resistance to abrasion**

180 Test inappropriate.

181 **12 Resistance to solvents**

182 Clause 12 of IEC 60317-0-9:2015 applies.

183 **13 Breakdown voltage**

184 Clause 13 of IEC 60317-0-9:2015 applies. The elevated temperature shall be 200 °C.

185 **14 Continuity of insulation**

186 Test appropriate.

187 **15 Temperature index**

188 Clause 15 of IEC 60317-0-9:2015 applies. The minimum temperature index shall be 200 °C.

189 **16 Resistance to refrigerants**

190 Test inappropriate.

191 **17 Solderability**

192 Test inappropriate.

193 **18 Heat or solvent bonding**

194 Test inappropriate.

195 **19 Dielectric dissipation factor**

196 Test under consideration.

197 **20 Resistance to transformer oil**

198 Test under consideration.

199 **21 Loss of mass**

200 Test inappropriate.

201 **23 Pin hole test**

202 Test inappropriate.

203 **30 Packaging**

204 Clause 30 of IEC 60317-0-9:2015 applies.

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