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colour inside

Specifications for particular types of winding wires – Part 68: Polyvinyl acetal enamelled rectangular aluminium wire, class 120

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CONTENTS

FOREWORD 3
INTRODUCTION 5
1 Scope 6
2 Normative references 6
3 Terms, definitions, general notes and appearance 6
3.1 Terms and definitions 6
3.2 General notes 7
3.2.1 Methods of test 7
3.2.2 Winding wire 7
3.3 Appearance 7
4 Dimensions 7
5 Electrical resistance 7
6 Elongation 7
7 Springiness 7
8 Flexibility and adherence 7
8.1 Mandrel winding test 7
8.2 Adherence test 8
9 Heat shock 8
10 Cut-through 8
11 Resistance to abrasion 8
12 Resistance to solvents 8
13 Breakdown voltage 8
14 Continuity of insulation 8
15 Temperature index 8
16 Resistance to refrigerants 8
17 Solderability 8
18 Heat or solvent bonding 9
19 Dielectric dissipation factor 9
20 Resistance to transformer oil 9
21 Loss of mass 9
23 Pin hole test 9
30 Packaging 9
Bibliography 10

Table 1 – Mandrel winding 8

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_____

SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 68: Polyvinyl acetal enamelled rectangular aluminium wire, class 120

FOREWORD

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IEC 60317-68 edition 1.2 contains the first edition (2017-01) [documents 55/1570/CDV and 55/1591/RVC], its amendment 1 (2019-06) [documents 55/1694/CDV and 55/1744/RVC] and its amendment 2 (2024-06) [documents 55/1694/CDV and 55/1744/RVC].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendments 1 and 2. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

International Standard IEC 60317-68 has been prepared by IEC technical committee 55: Winding wires.

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

This International Standard is to be read in conjunction with IEC 60317-0-9:2015 and its Amendment 1:2024.

A list of all parts in the IEC 60317, published under the general title *Specifications for particular types of winding wires*, can be found on the IEC website.

The numbering of clauses in this standard is not continuous from Clauses 21 through 30 in order to reserve space for possible future wire requirements prior to those for wire packaging.

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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*).*

SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 68: Polyvinyl acetal enamelled rectangular aluminium wire, class 120

1 Scope

This part of IEC 60317 specifies the requirements of enamelled rectangular aluminium winding wire of class 120 with a sole coating based on polyvinyl acetal or polyvinyl formal resin, which may be modified providing it retains the chemical identity of the original resin and meets all specified wire requirements.

NOTE 1 A modified resin is a resin that has undergone a chemical change, or contains one or more additives to enhance certain performance of application characteristics.

NOTE 2 Polyvinyl acetal is a general name for a family of thermoplastic vinyl resins produced by the condensation of polyvinyl alcohol with an aldehyde. Examples are polyvinyl acetal, polyvinyl formal and polyvinyl butyral.

The range of nominal conductor dimensions covered by this standard is

	Minimum	**Maximum**
Width	2,0 mm	16,0 mm
Thickness	0,80 mm	5,60 mm

Wires of grade 1 and grade 2 are included in this part of IEC 60317 and apply to the complete range of conductors.

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

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 60317-0-9:2015, *Specifications for particular types of winding wires – Part 0-9: General requirements – Enamelled rectangular aluminium wire*.
IEC 60317-0-9:2015/AMD1:*2024*

IEC 60851-4:2016, *Winding wires – Test methods – Part 4: Chemical properties*

CONTENTS

FOREWORD 3
INTRODUCTION 5
1 Scope 6
2 Normative references 6
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3.1 Terms and definitions 6
3.2 General notes 6
3.2.1 Methods of test 7
3.2.2 Winding wire 7
3.3 Appearance 7
4 Dimensions 7
5 Electrical resistance 7
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19 Dielectric dissipation factor 9
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Bibliography 10

Table 1 – Mandrel winding 7

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