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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
9 Heat shock 7
10 Cut-through 7
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 8
19 Dielectric dissipation factor 8
20 Resistance to transformer oil 8
21 Loss of mass 8
23 Pin hole test 8
30 Packaging 9
Bibliography 10

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Part 28: Polyesterimide enamelled rectangular copper wire, class 180

FOREWORD

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IEC 60317-28 edition 2.1 contains the second edition (2013-10) [documents 55/1415/FDIS and 55/1436/RVD] and its amendment 1 (2024-06) [documents 55/1988/CDV and 55/2023/RVC].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. 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 60317-28 has been prepared by IEC technical committee 55: Winding wires.

This second edition cancels and replaces the first edition published in 1990, Amendment 1:1997 and Amendment 2:2007. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

– new subclause containing general notes on winding wire, formerly a part of the scope;
– revision to references to IEC 60317-0-2:~~2013~~2020 to clarify that their application is normative;
– new 3.3, Appearance;
– deletion of Clause 22, High temperature failure;
– modification to Clause 23, Pin hole test.

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

This International standard is to be read in conjunction with the IEC 60317-0-2:~~2013~~2020.

The numbering of clauses in this standard is not continuous from Clauses 20 and 30 in order to reserve space for possible future wire requirements prior to those for wire packaging.

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

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INTRODUCTION

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

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

SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 28: Polyesterimide enamelled rectangular copper wire, class 180

1 Scope

This part of IEC 60317 specifies the requirements of enamelled rectangular copper winding wire of class 180 with a sole coating based on polyesterimide resin, which may be modified providing it retains the chemical identity of the original resin and meets all specified wire requirements.

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 60317-0-2~~:2013~~.

2 Normative references

~~The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application.~~ 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 60317-0-2:~~2013~~2020, *Specifications for particular types of winding wires – Part 0-2: General requirements – Enamelled rectangular copper wire*

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 6
3.2.1 Methods of test 6
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
9 Heat shock 7
10 Cut-through 7
11 Resistance to abrasion 7
12 Resistance to solvents 8
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