

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Specifications for particular types of winding wires –
Part 48: Glass-fibre wound resin or varnish impregnated, bare or enamelled
round copper wire, temperature index 155**

**Spécifications pour types particuliers de fils de bobinage –
Partie 48: Fil de section circulaire en cuivre nu ou émaillé, recouvert d'un
guipage de fibres de verre imprégnées de résine ou de vernis, indice de
température 155**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SPECIFICATIONS FOR PARTICULAR
TYPES OF WINDING WIRES –****Part 48: Glass-fibre wound resin or varnish impregnated, bare
or enamelled round copper wire, temperature index 155**

FOREWORD

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International Standard IEC 60317-48 has been prepared by IEC technical committee 55: Winding wires.

This second edition cancels and replaces the first edition, published in 1999. 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 part of the scope;
- new subclause containing requirements for appearance;
- new Clause 23, Pin hole test.

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

FDIS	Report on voting
55/1326/FDIS	55/1341/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.

This International Standard is to be read in conjunction with IEC 60317-0-6:2001 and its Amendment 1:2006.

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 the 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.

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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 48: Glass-fibre wound resin or varnish impregnated, bare or enamelled round copper wire, temperature index 155

1 Scope

This part of IEC 60317 specifies requirements of glass-fibre wound resin or varnish impregnated, bare, grade 1 or grade 2 enamelled round copper winding wire, temperature index 155. The impregnating agent can be, for instance, polyester or polyesterimide resin based.

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.

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 60317-0-6:2001, *Specifications for particular types of winding wires – Part 0-6: General requirements – Glass-fibre wound resin or varnish impregnated, bare or enamelled round copper wire*
Amendment 1:2006

3 Terms, definitions, general notes and appearance

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in 3.1 of IEC 60317-0-6:2001 and its Amendment 1:2006 apply.

3.2 General notes

3.2.1 Methods of test

Subclause 3.2 of IEC 60317-0-6:2001 applies.

In case of inconsistency between IEC 60317-0-6 and this standard, IEC 60317-48 shall prevail.

3.2.2 Winding wire

The enamelled wire shall have a temperature index of at least 155, and shall be agreed between purchaser and supplier.

The temperature index of the wire is dependent upon the type of impregnating agent used. The impregnating agent applied to the glass-fibre shall have a minimum temperature index of 155.