

(PREVIEW)
Indian standard

**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.

The enamelled wire shall be based on one of the following standards: IEC 60317-3, IEC 60317-8 or IEC 60317-13, and 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 should have a minimum temperature index of 155.

The glass-fibre covering may be

- a) a single layer of glass-fibre;
- b) a double layer of glass-fibre, with one layer applied in the direction opposite to that of the other layer.

The range of nominal conductor diameters covered by this standard is the following:

- for bare covered wires (grade G2): 0,500 mm up to and including 5,000 mm;
- for grade 1 enamelled wires (grades 1G1 and 1G2): 0,500 mm up to and including 1,600 mm;
- for grade 2 enamelled wires (grades 2G1 and 2G2): 0,500 mm up to and including 5,000 mm.

The nominal conductor diameters are specified in clause 4 of IEC 60317-0-6.

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 60317-0-6,— *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* ¹⁾

IEC 60317-3 : 1990, *Specifications for particular types of winding wires – Part 3: Polyester enamelled round copper wire, class 155*

IEC 60317-8 : 1990, *Specifications for particular types of winding wires – Part 8: Polyesterimide enamelled round copper wire, class 180*

IEC 60317-13 : 1990, *Specifications for particular types of winding wires – Part 13: Polyester or polyesterimide overcoated with polyamide-imide, enamelled round copper wire, class 200*