

# Specifications for particular types of winding wires —

## Part 31: Glass-fibre wound resin or varnish impregnated, bare or enamelled rectangular copper wire, temperature index 180

The European Standard EN 60317-31:1996, with the incorporation of its amendment A1:1997 and amendment A2:2005, has the status of a British Standard

ICS 29.060.10

# Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee GEL/55, Winding wires, upon which the following bodies were represented:

- Covered Conductors Association
- Electrical and Electronic Insulation Association (BEAMA Ltd.)

This British Standard, having been prepared under the direction of the Electrotechnical Sector Board, was published under the authority of the Standards Board and comes into effect on 15 April 1993

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The following BSI reference relates to the work on this standard:  
Committee reference GEL/55  
Special announcement in *BSI News*, January 1993

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## Amendments issued since publication

| Amd. No. | Date           | Comments                                |
|----------|----------------|-----------------------------------------|
| 9460     | 1997           | Renumbers BS 6811-6.1 as BS EN 60317-31 |
| 10332    | May 1999       | See National Foreword                   |
| 16131    | 31 August 2006 | See National Foreword                   |
|          |                |                                         |

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## National foreword

This British Standard has been prepared by Technical Committee GEL/55 (formerly CIL/55) and is the English language version of EN 60317-31:1996 *Specifications for particular types of winding wires — Part 31: Glass-fibre wound resin or varnish impregnated, bare or enamelled rectangular copper wire, temperature index 180*, including amendment A1:1997 and amendment A2:2005, published by the European Committee for Electrotechnical Standardization (CENELEC). It is identical with IEC 60317-31:1990, including amendment 1:1997 and amendment 2:2005, published by the International Electrotechnical Commission (IEC).

NOTE IEC 317-31:1990 was approved by CENELEC as HD 555.31 S1 in June 1992. This HD was subsequently submitted for formal vote for conversion into a European Standard and was approved as EN 60317-31 in July 1996.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**. Tags indicating changes to IEC text carry the number of the amendment. For example, text altered by IEC amendment 1 is indicated by **A1** **A1**.

This British Standard is one of a series which deals with insulated wires used for windings in electrical equipment, which comprises following three groups.

*Winding wires — Test methods* (BS EN 60851)

*Specifications for particular types of winding wires* (BS EN 60317)

*Packaging of winding wires* (BS EN 60264)

BS 6811 *Winding wires — Part 0:1993 General introduction and list of Parts* lists the various Sections of BS 6811 and BS 7584 against the corresponding Parts of the IEC standards listed above. Most of these IEC standards have been, or will be, adopted as ENs and the relevant Parts of BS 6811 and BS 7584 have been, or will be, renumbered as BS ENs.

### Cross-references

| Publication referred to                | Corresponding British Standard                                                                                                                                                                                                                                                                |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EN 60317-0-4:1994<br>(IEC 317-04:1990) | BS 6811 <i>Winding wires</i><br>Part 6: <i>Specifications for particular types of glass-fibre wound bare or enamelled rectangular copper winding wires</i><br>Section 6.0:1993 <i>General requirements</i>                                                                                    |
| EN 60317-16:1994<br>(IEC 317-16:1990)  | BS 6811 <i>Winding wires</i><br>Part 4: <i>Specifications for particular types of enamelled rectangular copper winding wires</i><br>Section 4.4:1993 <i>Polyester enamelled rectangular copper wire, class 155</i><br>BS EN 60317 <i>Specifications for particular types of winding wires</i> |
| EN 60317-28:1996<br>(IEC 317-28:1990)  | Part 28:1997 <i>Polyesterimide enamelled rectangular copper wire, class 180</i>                                                                                                                                                                                                               |
| EN 60317-29:1996<br>(IEC 317-29:1990)  | Part 29:1997 <i>Polyester or polyesterimide overcoated with polyamide-imide enamelled rectangular copper wire, class 200</i>                                                                                                                                                                  |
| EN 60317-30:1996<br>(IEC 317-30:1990)  | Part 30:1997 <i>Polyimide enamelled rectangular copper wire, class 220</i>                                                                                                                                                                                                                    |

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

**Compliance with a British Standard does not of itself confer immunity from legal obligations.**

### Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 8, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Descriptors: Winding, electric wire, insulated wire, wound wire, copper, glass fibre, polyester, rectangular shape, specification, dimension

English version

Specifications for particular types of winding wires  
Part 31: Glass-fibre wound resin or varnish impregnated,  
bare or enamelled rectangular copper wire,  
temperature index 180

Spécifications pour types particuliers  
de fils de bobinage  
Partie 31: Fil de section rectangulaire en cuivre  
ou en cuivre émaillé, guipé de fibres de verre  
imprégnées de vernis polyester ou  
polyesterimide indice de température 180

Technische Lieferbedingungen für bestimmte  
Typen von Wickeldrähten  
Teil 31: Flachdrähte aus Kupfer, blank oder  
lackisoliert, umhüllt mit Glasgewebe und  
imprägniert mit Polyester-oder  
Polyesterimidlack, mit Temperaturindex 180

This European Standard was approved by CENELEC on 1996-07-02; amendment A1 was approved by CENELEC on 1997-10-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

## CENELEC

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B-1050 Brussels