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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 23312.1-2009

**Enamelled round aluminium winding wire -- Part 1: General
requirements**

漆包铝圆绕组线 第1部分：一般规定

(English Translation)

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Foreword

GB/T 23312 "enamelled round aluminum winding wire" is divided into seven parts.

- Part 1. General requirements;
- Part 2. 120 acetal enamelled round aluminum wire;
- Part 3. Polyester enamelled round aluminum wire;
- Part 4. 155 polyester enameled round aluminum wire;
- Part 5. 180 polyester enamelled round aluminum wire;
- Part 6. 180 polyester or polyester-imide/polyamide composite enameled round aluminum wire;
- Part 7. 200 polyester or polyester-imide/polyamide-imide enamelled round aluminum wire.

This is Part 1 GB/T 23312 of.

This section identical with IEC 60317-0-3:2008 "product standards of winding wires - Part 0-3. General enameled round aluminum Line "Version 3.0 (in English).

For ease of use, this section made the following editorial changes.

- Remove the IEC 60317-0-3:2008 Foreword;
- With a decimal point instead of a comma as the decimal point, ",";
- Increase the informative Appendix D and Appendix E. informative this part identical with IEC 60317-0-3:2008 "product standards of winding wires - Part 0-3. General enameled round aluminum Line "Fixes several original editorial errors, which amended as follows.
- The 8.2 "tensile test (nominal conductor diameter than 1.000mm)" with "tensile test (nominal diameter of conductor 1.600mm or more) ";
- Chapter 18 of the "thermal bonding and solvent bonding" with "thermal bonding";
- Table A. 2 "within a maximum thickness of paint" to "minimum thickness in the paint";
- The B. Calculation Formula 1 conductor maximum and minimum resistance in the "conductor nominal cross-sectional area" were changed to "maximum conductor cross-section Product "and" minimum cross-sectional area of the conductor. " this section of the Appendix A, Appendix B, Appendix C, Appendix D, Appendix E is an information appendix.

This part is proposed by the China Electrical Equipment Industrial Association.

This part of the National Standardization Technical Committee Wire and Cable

(SAC/TC213) centralized.

This section is drafted. Shanghai Electric Cable Research Institute, Tongling fine Xun special enameled wire limited liability company, Fuzhou Chase Electrical Co., Ltd., the Buddha Mountain Sandwich electrician Material Co., Ltd., Tianjin and bimetallic Wire Co., Ltd. Zhuji exposed laugh specialty lines, Wuxi Jufeng complex Line Ltd., Galanz (Zhongshan) Electrical Wire Co., Huang Yang Copper Co., Ltd., Zhejiang Great Wall Electronic Technology Group, Zhejiang Honglei Copper Industry Co., Ltd., Zhejiang first board Electrical Equipment Co., Ltd., Zhejiang Hongbo Cable Co., Ltd., Shanghai Yusheng Special Wire has Ltd., Xuzhou Bao Sheng Industrial Co., Ltd., Shanghai Chongming special Electromagnetic Wire Factory.

1 Scope

This section GB/T 23312 specifies the general requirements for self-adhesive and non-self-adhesive enameled round aluminum winding wire.

Conductor nominal diameter range in the relevant product standard (Type table and see Appendix D).

When referring to Chapter 2, mentioned in GB/T 23312 standard in one wire, in the description given need the following.

- GB number and (or) IEC number;
- Nominal conductor diameter, mm;
- Film thickness levels.

Example. GB/T 23312.70.5001 level or IEC 60317-25-0.500Grade1

2 Normative references

The following documents contain provisions which, through reference GB/T 23312 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 321-2005 priority number and priority number system (ISO 3. 1973, IDT) GB/T 4074.1-2008 Winding wires test methods - Part 1. General requirements (IEC 60851-1:1996, IDT) GB/T 4074.2-2008 Winding wires test methods - Part 2. Measure (IEC 60851-2:1997, IDT) GB/T 4074.3-2008 Winding wires test methods - Part 3. Mechanical properties (IEC 60851-3:1997, IDT) GB/T 4074.4-2008 Winding wires test methods - Part 4. Chemical properties (IEC 60851-4:2005, IDT) GB/T 4074.5-2008 Winding wires - Test

methods - Part 5. Electrical properties (IEC 60851-5:2004, IDT) GB/T 4074.6-2008 Winding wires - Test methods - Part 6. Thermal properties (IEC 60851-6:1996, IDT) GB/T 4074.7-2009 Winding wires - Test methods - Part 7. Test methods for temperature index of enamelled winding wires Determination (IEC 60172. 1987, IDT)

3.1 Definitions

3.1.1

A coating material in the enameled wire, enameled wire bonded to each other with a specific function.

3.1.2

The temperature index and heat shock temperature represented enameled thermal performance.

3.1.3

With an appropriate method of coating material to one conductor or wire, and then drying and/or curing.

GB/T 23312.1-2009/IEC 60317-0-3:2008