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

GB/T 5019.3-2009

Replacing GB/T 5021-2002

**Specification for insulating materials based on mica -- Part 3:
Commutator separators and materials**

以云母为基的绝缘材料 第3部分：换向器隔板和材料

(English Translation)

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Foreword

GB/T 5019 "with mica-based insulating materials" is divided into the following sections.

- Part 1. Definitions and general requirements;
- Part 2. Test methods;
- Part 3. Commutator separators and materials;
- Part 4. Mica paper;
- Part 5. electric equipment mica plate;
- Part 6. Polyester film reinforced B stage epoxy resin binder;
- Part 7. vacuum pressure impregnation (VPI) film reinforced with glass cloth and epoxy resin binder;
- Part 8. Glass fabric reinforcement B stage epoxy resin binder;
- Part 9. single wire wrapped with epoxy polyester film mica;
- Part 10. fire-resistant safety cables mica;
- Part 11. plastic mica plate.

This section GB/T 5019 Part 3.

The partial modification of the use of IEC 60371-3-1:2006 "with mica-based insulating materials - Part 3. Specifications for individual materials 1.

Commutator separators and materials "(in English).

This part of IEC 60371-3-1:2006 technical differences are as follows.

a) Remove the IEC 60371-3-1:2006 foreword and introduction, some of its contents into the

preparation of this part of the preamble;

b) in Table 3 and Table 4, "Electrical strength" requirement value by the "7kV/mm" to "20kV/mm".

This Part replaces GB/T 5021-2002 "Commutator separators and materials." this section compared with GB/T 5021-2002 The main changes are as follows.

a) delete the relevant IEC standard foreword and introduction;

b) Increase the head Table 1 and Table 2;

c) Table 3 and Table 4, "Electrical strength" requirement value by the "7kV/mm" to "20kV/mm".

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

This part of the National Standardization Technical Committee of the insulating material (SAC/TC51) centralized.

This part mainly drafted by. Guilin Institute of Electrical Science.

Drafters of this section. Wang Xianfeng.

This part of the standard replaces the previous editions are.

--- GB/T 5021-1985, GB/T 5021-2002.

Mica-based insulating materials Part 3. Commutator separators and materials

1 Scope

GB/T 5019 This section applies to the commutator separator to peel mica or mica paper as base of hard materials.

These products are made of gold sheet or muscovite mica or mica paper bonded together with a suitable adhesive. Its delivery form as follows.

--- To suppress or by trimming the size of supply after the sheet;

--- By the sheet cut into strips;

--- Meet the conditions of the user ordering the shape and size of the commutator separators.

The nominal thickness of the product is 0.3mm ~ 2.0mm.

2 Normative references

The following documents contain provisions which, through reference to GB/T 5019 to the present, 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 5019.2-2009 mica-based insulating materials - Part 2. Test methods (IEC 60371-2:2004, MOD)

3 General requirements

Material hardness should be uniform, without spots and foreign substances.

Used adhesive agreed by both parties.

When the press GB/T 5019.2-2009 test, the material shall comply with the requirements of this section.

4.1 Nominal thickness is defined

Nominal thickness of the desired thickness of the order, (before the commutator assembly) thickness that is the time of arrival.

4.2 Measurement deviation

Relative to the nominal thickness deviation (mm) provides as follows.

4.2.1 Sheet, strip and surface area ≤ 10 Ba m1 commutator separators 2

According to the provisions of GB/T 5019.2-2009 5.2.1 and 5.2.4. Measuring the thickness shall GB/T 5019.2-2009 specified in 5.1.3 Instrument (measuring surface diameter of 6mm ~ 8mm, pressure 7MPa).

Thickness measurement should be GB/T 5019.2-2009 5.3 provisions, thickness variation shown in Table 1.

Table 1 sheet and strip thickness deviation unit surface area ≤ 10 Ba m1 commutator separator 2 mm

Type peeling mica

Mica paper

(Normal Deviation)

Mica paper

(Precision bias)

Sample error $\pm 0.03 \pm 0.03 \pm 0.02$ the maximum value of the same thickness of the

specimen and the difference between the minimum thickness value 0.06 0.06 0.04