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SPECIFICATION

IEC  
PAS 62072

Pre-Standard

First edition  
2005-01

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**Natural graphite brush for rotating  
electrical machinery –  
Basic characteristics**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

# NATURAL GRAPHITE BRUSH FOR ROTATING ELECTRICAL MACHINERY – BASIC CHARACTERISTICS

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IEC-PAS 62072 has been processed by IEC technical committee 2: Rotating machinery.

The text of this PAS is based on the following document:

This PAS was approved for publication by the P-members of the committee concerned as indicated in the following document

Draft PAS	Report on voting
2/1301A/NP	2/1318/RVN

Following publication of this PAS, which is a pre-standard publication, the technical committee or subcommittee concerned will transform it into an International Standard.

This PAS shall remain valid for an initial maximum period of three years starting from 2005-01. The validity may be extended for a single three-year period, following which it shall be revised to become another type of normative document or shall be withdrawn.

# NATURAL GRAPHITE BRUSH FOR ROTATING ELECTRICAL MACHINERY – BASIC CHARACTERISTICS

## 1 Scope

This PAS applies to brushes for commutators and slip-rings in rotating electrical machinery.

This excludes brushes of electrical appliances such as starters of automobiles and tractors, micro-appliances for household and tools, appliances for aeronautics and space, and others operating in special conditions.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60276, *Definitions and nomenclature for carbon brushes, brush-holders, commutators and slip-rings*

IEC 60413, *Test procedures for determining physical properties of brush materials for electrical machines*

IEC 60773, *Test methods and apparatus for the measurement of the operational characteristics of brushes*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

#### **NG brush material**

material, which consists of natural graphite mineral with developed crystal structure and a binder able to take appropriate characteristics as brush

### 3.2

#### **NG brush**

brush for commutator and slip-ring made of NG brush material in accordance with IEC 60276, Clause 2

## 4 Classification

The NG brushes should be classified in accordance with 4.1 to 4.4.

### 4.1 According to usage:

- a) commutator brush;
- b) slip-ring brush.

### 4.2 According to grade of rotating electrical machinery:

- a) for d.c. electrical machine;