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

GB/T 22716-2008

**Test specifications of interturn insulation of armature winding
for DC electrical machines**

直流电机电枢绕组匝间绝缘试验规范

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Foreword

The standard proposed by China Electrical Equipment Industrial Association. The standard rotary motor by the National Standardization Technical Committee (SAC/TC26) centralized. This standard is drafted by: Shanghai Electrical Apparatus Research Institute (Group) Co., Ltd., Shanghai Branch Electric Motor Co., Ltd., Jiangmen City Jiang Sheng Motor Co., Ltd., Zhejiang Jinlong Electrical Machinery Co., Ltd., Suzhou Jufeng Insulation Materials Co., Ltd., Shanghai Shanghai hair detection Instrument Factory, Sea Hawk Shanghai Electrical and Mechanical testing equipment plant. Participated in the drafting of this standard. Guilin Electrical Apparatus Research Institute, Harbin Electrical Machinery Plant AC and DC motor limited liability company. The main drafters. Zhang Shengde, Rong Weikang, Li Jinliang, Zhang Fei, Liu Quan, leaf, Xu Weihong, Xu Baodi Mattress flag at Long Ying, Fang Jianguo. This standard is the first release. Armature Windings between DC insulation test specification

1 Scope

GB/T 22716-2008 is the Chinese national standard on test specifications of interturn insulation of armature winding for dc electrical machines, in the field of electrical engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 30 December 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 October 2009. Classification: ICS 29.160.30, CCS K23. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the test methods for insulating between DC Armature Windings and

test limits. This standard applies to the rated voltage between 110V and above DC Armature Windings insulation withstand voltage test. Other DC Unless otherwise requested, should also refer to use. This standard does not apply to micro-motors.

2 Terms and definitions

The following terms and definitions apply to this standard.

2.1 Room with impulse voltage test DC Armature Windings insulation method. On the armature commutator span to take a while, in the end to the commutator segments impulse voltage is applied to the test.

2.2 Room with impulse voltage test DC Armature Windings insulation method. Armature commutator of two adjacent transducer impulse voltage is applied to the on-chip test.

3 Check before test coil offline

3.1 Test Objective For controlling between single coil turn insulation quality.

3.2 Test Requirements

3.2.1 should simulate the actual state of the coil in the core tank, take measures to tighten the turns of the coil under test, and set aside in the insulation Test well on the shelf.

3.2.2 For the rated voltage of 660V and below general purpose motors, such as turn insulation quality has stabilized and mass production, single Only coil and equalizing lines generally do not carry out withstand voltage between turns off the assembly line before the inspection test. For large motors (outside diameter of 990mm and with armature On), lifting metallurgical and special purpose motor rated voltage of 660V or more motors, single coil and equalizing lines should be off the assembly line before the turn Check the voltage between the resistance test.

3.3 Test Methods and Limits

3.3.1 among different coil unit interturn voltage test After all kinds of molded coil and equalizing lines manufactured prior to assembly line should give priority to power frequency voltage or a DC voltage different coil units Interturn voltage test, the test voltage is applied between two adjacent turns. The test voltage according to the following provisions. For the rated voltage of 660V and below general purpose motors rms power frequency test voltage of not less than 220V, DC test voltage It should not be less than 400V. For hoisting metallurgy and other special-purpose motor and a rated voltage of 660V or more motors, power frequency test voltage Valid values \u200b\u200bshould not be less than 530V, DC test voltage shall not be less than 960V. Frequency voltage or DC voltage test time is 1s ~ 3s.

3.3.2 same coil unit turns withstand voltage test After forming a multi-turn coil manufactured prior to assembly line should be the same coil unit impulse voltage between turns withstand voltage test.

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