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

GB/T 20111.3-2016

Replacing GB/T 20111.3-2008

**Electrical insulation systems -- Procedures for thermal
evaluation -- Part 3: Specific requirements for encapsulated-coil
model -- Wire-wound electrical insulation system (EIS)**

电气绝缘系统 热评定规程 第3部分：包封线圈模型的特殊要求 散绕绕组电气绝缘
系统（EIS）

(English Translation)

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Foreword

GB/T .20111 "Electrical insulation system thermal evaluation procedures" contains three parts.

- Part 1. General requirements Low pressure;
- Part 2. Particular requirements for general purpose applications;

Part 3. Particular requirements for enveloping coil models - Spray winding electrical insulation systems (EIS).

This part is part 3 of GB/T .20111.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part of the replacement of GB/T .20111.3-2008 "Electrical insulation system thermal evaluation procedures Part 3. encapsulated coil model of special Requirements scattered around the winding electrical insulation system (EIS) ", and GB/T .20111.3-2008 compared to the main technical changes are as follows.

- the term "inter-coil insulation" and "grounding" (see 3.5, 3.6);
- the term "insulation between windings" (version 3.5 of 2008) was removed;
- Change the "aging test cycle" to "Durability test cycle" (see 6.3.1 for the 2008 edition).

This part uses the translation method equivalent to IEC 61857-22.:2008 "Electrical insulation system thermal evaluation procedures Part 22. Envelope lines Circle model of the special requirements of scattered winding electrical insulation system (EIS) ".

In this part of the normative reference to the international documents have a consistent correspondence between the following documents.

GB/T .20111.1-2015 Thermal insulation for electrical insulation systems - Part 1. General requirements Low pressure (IEC 61857-1.:2008, IDT) this part is made by China Electrical Equipment Industry Association.

This part of the National Electrical Insulation Materials and Insulation System Standardization Technical Committee (SAC/TC301) centralized.

This part is responsible for drafting units. Suzhou Taihu Electric New Materials Co., Ltd., Yantai Min Shi of Special Paper Co., Ltd., machine Machinery Industry Beijing Institute of Technology and Economy, Shanghai Electric Research Institute.

This part participates in the drafting unit. Shunde District of Foshan City, the quality and technical supervision standards and coding, Penglai City special insulating materials plant, Beijing North Heavy truck motor limited liability company.

1 Scope

This part of GB/T .20111 specifies the encapsulated coil model (ECM) for the evaluation of the wrapped wrap-around winding EIS.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document.

IEC 61857-1.:2004 Thermal insulation for electrical insulation systems - Part 1. General requirements - Low pressure (Electrical)
insulationsystems-Proceduresforthermalevaluation-Part 1.
Generalrequirements-Low-voltage)

3 Terms and definitions

IEC 61857-1.:2004 Definitions and the following terms and definitions apply to this document.

Encapsulant

In addition to the external connection outside the coil completely enclosed electrical insulation material, electrical insulation system is one of the components.

Note: The enclosure coil model does not use the accessory housing.

Encapsulate encapsulation the process of using encapsulants.

Note: Depending on the needs of the electrical insulation system, the process may consist of injection molding, die casting, or other methods.

Bobbin

Wound molds.

Coil coil

Continuous winding of insulated wires.

Coil-insulated coil-to-coilinsulation Electrical insulation between coils.

Ground

An electrical connection between a point in the system, device, or device.

Ground insulation

The electrical insulation between the coil and the ground.