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

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**Reciprocating internal combustion gas generating
sets-Calculating methods of power correction, power
adjustment and recalculating specific fuel consumption**

往复式内燃燃气发电机组 功率和燃料消耗率换算方法

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

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Reciprocating internal combustion gas generator set Power and fuel consumption conversion method

1 Scope

This document defines the terms and definitions, symbols, and describes the standard reference conditions, power correction calculations, and Calculation method, power adjustment and fuel consumption rate conversion method.

This document applies to the power adjustment and fuel consumption rate of reciprocating internal combustion gas generator sets (hereinafter referred to as "gas generator sets") The matching engine is a gas engine (hereinafter referred to as "engine").

2 Normative references

GB/T 6072.1-2008

GB/T 21404-2022

3 Terms and definitions

The terms and definitions defined in GB/T 6072.1-2008, GB/T 21404-2022 and the following apply to this document.

3.1 Power adjustment poweradjustment

In order to keep the thermal load and/or mechanical load of key engine components roughly constant, the power value under a certain environmental condition is corrected to A calculation procedure used to estimate the power value under alternative environmental conditions.

[Source. GB/T 21404-2022, 3.3.9]

3.2 Power correction powercorrection

Correct the power value measured by the engine under test conditions to the power value expected under other operating conditions or reference conditions without The calculation procedure used for any engine adjustment (3.5).

[Source. GB/T 21404-2022, 3.3.10]

3.3 Gas consumption ratio

When the engine is running stably under a certain condition, the gas fuel at a certain temperature and pressure consumed per unit power per unit time volume. Note. The unit is $\text{m}^3/(\text{kW}\cdot\text{h})$.

3.4 Heat consumption rate heat consumption rate

When the engine is running stably under a certain working condition, the gas fuel consumed per unit power per unit time is completely burned.