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

GB/T 2820.4-2009

Replacing GB/T 2820.4-1997

**Reciprocating internal combustion engine driven alternating
current generating sets -- Part 4: Controlgear and switchgear**

往复式内燃机驱动的交流发电机组 第4部分：控制装置和开关装置

(English Translation)

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Foreword

GB/T 2820 in "reciprocating internal combustion engine driven alternator group," the general heading consists of the following components.

--- Part 1. Application, ratings and performance

--- Part 2. Engines

--- Part 3. Generator with alternator

--- Part 4. Control and switchgear

--- Part 5. Generator

--- Part 6. Test methods

--- Part 7. technical conditions for the technical description and design

--- Part 8. small power generator set requirements and tests

--- Part 9. Measurement and evaluation of mechanical vibrations

--- Part 10. Measurement of noise (enveloping surface method)

--- Part 11. Rotary uninterruptible power supply performance requirements and test methods

--- Part 12. Emergency power supply to safety devices this section GB/T 2820 Part 4. This

part identical with ISO 8528-4. "Reciprocating internal combustion engine driven alternating current 2005 Turbines - Part 4. control means and switching means. " this Part replaces GB/T 2820.4-1997 "Reciprocating internal combustion engine driven alternating current generating sets - Part 4. Controlgear and switchgear Means. " this section compared with the GB/T 2820.4-1997, mainly for the reference standard, the provisions of choreography and editorial changes.

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

This part of the mobile station by the National Standardization Technical Committee (SAC/TC329) centralized.

This part mainly drafted by. Lanzhou Institute of power vehicles, Shenzhen Superwatt Power Technology Co., Ltd., Shanghai Electric Power Creative Fu Ltd., Shenzhen City Waldock BOND New Energy Co., Ltd.

1 Scope

This section GB/T 2820 provisions by reciprocating internal combustion (RIC) engine driven generating sets with control means and switching means Claim.

This section applies to the reciprocating internal combustion (RIC) engine driven land and marine AC (a.c.) generator sets, does not apply to aviation or flooding Moving land vehicles and locomotives generators.

For some special purposes (such as hospitals, high-rise buildings essential power supply), additional requirements may be needed. The provisions of this section it can be used as the basis to determine any additional requirements.

For other types of reciprocating by a prime mover (such as a steam engine) driven alternating current (a.c.) generator sets, the provisions of this section may as a basis.

2 Normative references

The following documents contain provisions which, through reference to GB/T 2820 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 755-2008 rotating motor fixed and performance (IEC 60034-1:2004, IDT) GB/T 2820.1-2009 Reciprocating internal combustion engine driven alternating current generating sets - Part 1. Application, ratings and performance (ISO 8528-1:2005, IDT) GB/T 2820.5-2009 Reciprocating internal combustion engine driven alternating current generating sets - Part 5. Generator (ISO 8528-5.

2005, IDT)

GB 4556-2001 reciprocating internal combustion fire (idt ISO 6826:1997) GB 7251.1-2005 voltage switchgear and control equipment Part 1. Type - tested and partially type-tested assemblies (IEC 60439-1:1999, IDT) IEC 60947-1:2001 Low-voltage switchgear and control equipment - Part 1. General IEC 62271-200:2003 rated voltage of AC steel 1kV ~ 52kV switchgear and control means

3 Other provisions and additional requirements

Of the classification rules must be observed, on the ship's deck and a reciprocating internal combustion (RIC) offshore installation of motor drives for AC (a.c.) Hair Motor group, should meet the additional requirements of the classification society. The name of the Society shall be user before issuing the order described.

AC (a.c.) generator set without level device for operation, subject to any additional requirements for manufacturers and users agreed.

To satisfy other regulatory bodies (such as checking and/or legislative bodies) specific requirements set out in regulations, the governing body should be the name of the user Statement before issuing the order.

Any other additional requirements by the manufacturer and user agreement.

General requirements for four pairs of devices

4.1 Assembly

Switchgear, control devices and monitoring equipment can be integral or remote mounted generator set, split installation cabinet may be one or more.

GB/T 2820.4-2009/ISO 8528-4:2005