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

GB/T 2820.11-2012

**Reciprocating internal combustion engine driven alternating
current generating sets -- Part 11: Rotary uninterruptible power
systems -- Performance requirements and test methods**

往复式内燃机驱动的交流发电机组 第11部分：旋转不间断电源 性能要求和试验
方法

(English Translation)

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Foreword

GB/T 2820 "Reciprocating internal combustion engine driven alternator group" consists of the following components.

- Part 1. Application, ratings and performance;
- Part 2. engine;
- Part 3. generating sets alternators;
- Part 4. control means and switching means;
- Part 5. Generator;
- Part 6. Test methods;
- Part 7. technical conditions for the technical description and design;
- Part 8. Requirements for low-power generating sets and test;
- Part 9. Measurement and evaluation of mechanical vibration;
- Part 10. Measurement of noise (enveloping surface method);
- Part 11. Power rotation uninterrupted performance requirements and test methods;
- Part 12. Emergency power supply to safety devices.

This part of GB/Part 11 T 2820's.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the translation method is equivalent to using the international standard IEC 88528-11:2004 "Reciprocating internal combustion engine driven alternator group Part 11. Rotating power performance requirements and test methods "uninterrupted.

Correspondence between the consistency of the standards of international documents and normative references of the following documents.

--- GB/T 2820.9-2002 Reciprocating internal combustion engine driven alternating current generating sets - Part 9. Measurement and evaluation of mechanical vibrations Price (ISO 8528-9:1995, MOD)

--- Part 10 GB/T 2820.10-2002 Reciprocating internal combustion engine driven alternator group. measurement noise (noodles Method) (ISO 8528-10:1998, MOD)

--- GB/T 7260.3-2003 uninterruptible power supply (UPS) - Part 3. Method of specifying the performance and test requirements (IEC 62040-3:1999, MOD)

--- GB/T 16273.1-2008 equipment - Graphical symbols - Part 1. Common symbols (ISO 7000:2004, NEQ) 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. Shanghai Electrical Apparatus Research Institute (Group) Co.,

Ltd., Lanzhou Institute of power vehicles, Shanghai CETC Motor Co., Ltd., Ordnance Engineering College, CSIC Electrical Machinery Co., Ltd., Zhengzhou Guang Power Equipment Co., Ltd, China CNR Yongji Electric Factory, Elcoteq power supply (Shanghai) Co., Ltd., Lanzhou Electric Co., Ltd., Shenzhen Science and Technology Co., Superwatt power the company, Fu'an in Fujian Mindong Electric Co., Ltd. Narayanan, Imtech, Tellhow Technology Co., Ltd., on Haimaigete Motor Co., Shanghai-Hui Electric Co., Ltd., Zhejiang Jinlong Electric Co., Ltd., Wolong Electric Group Co., Ltd.

1 Scope

This section GB/T 2820 specifies the mechanical and electrical rotating equipment combination of rotary uninterruptible power supply (UPS) to the performance of Sum test methods. This section applies to power, mainly to provide users with uninterrupted alternating current. When no mains input operation, the input energy Reciprocating internal combustion engine or stored energy provided by one or more rotating motor output power.

This section applies to AC, mainly to provide uninterrupted power to the fixed land and marine facilities. It does not include air, land and vehicles Locomotive power supply. Nor generating static electricity converting output power.

This part of the AC power supply using a rotary UPS improve quality, achieve the voltage and/or current transformation and reduction of the peak and so were description.

For some special purposes (such as hospitals, near the coast, the non-stationary applications, high-rise buildings and nuclear facilities, etc.), others may require additional Requirements, the provisions of this section shall be used as the basis.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

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 2820.6-2009 Reciprocating internal combustion engine driven alternating current generating sets - Part 6. Test methods (ISO 8528-6.

2005, IDT)

GB 4208-2008 housing protection (IP Code) (IEC 60529:2001, IDT) GB/T 5465.2-2008 Graphical symbols for electrical equipment - Part 2. Graphical symbols (IEC 60417DB.2007, IDT) GB/T 6072.1-2008 Reciprocating internal combustion engines - Part 1. Power, calibration and testing of fuel and lubricating oil consumptions Additional