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

GB/T 13928-2015

Replacing GB/T 13928-2002

Reciprocating miniature air compressors

微型往复式空气压缩机

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Quarantine;
Standardization Administration of the PRC**

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 13928-2002 "Miniature reciprocating piston air compressor." This standard compared with GB/T 13928-2002, in addition to editorial changes outside the main technical changes are as follows:

- In the "Scope", an increase of 18.5kW, 0.5MPa profile reciprocating piston air compressor is also applicable (see Chapter 1);
- Increasing the choice available to the nominal volume flow parameter list and selection conditions (see 4.3 and Table 2);
- Adjustment 0.7 (0.8) Part MPa, 1.0MPa, 1.25MPa pressure levels than other commonly used indicators of power, supplemented 18.5kW, 0.5MPa profile than the power indicator (see Table 5.5 and 4, 2002 version 5.3 and Table 3);
- Increasing the energy efficiency assessment indicators (unit power input ratio) requirements (see 5.5);
- Increasing the safety valve working pressure requirements, standards and procedures complement the safety valve should be met (see 5.14);
- Adjustment for gas tank and safety requirements of Annex, shall be subject to the provisions of TSGR0003 supervisory inspection (see 5.21, 2002 edition 5.20);
- Increase the unit power input ratio measurement method in accordance with the provisions of GB 19153 (see 6.2);
- Remove the inspection rules in the "sampling" (see 2002 edition 7.3);
- Unit input specific power increased inspection requirements on the content type testing

[see 7.2.4b)];

--- Factory inspection test items adjusted when requiring examination only volume flow and power at rated discharge pressure, and allow room Access methods of assessment and verification (see 7.3, 2002 version 7.2). The standard proposed by China Machinery Industry Federation. This standard by the National Standardization Technical Committee of the compressor (SAC/TC145) centralized. This standard was drafted. Hefei General Machinery Research Institute, Zhejiang red rings Machinery Co., Ltd., Zhejiang mountains Compressor Co. Shares The company, Fu Sheng Industrial Co. (Shanghai) Co., Lida (China) Electrical Co., Ltd., Zhejiang Electric Co., Ltd. Roddy. The main drafters of this standard. Ren Fang, Chen Fang, Jiang Jianjiang, Zhu Jianguo, Dongping, Huang Daping, Lin Xing. This standard replaces the standards previously issued as follows:

1 Scope

China's national standard for miniature reciprocating piston air compressors - the small air-cooled, single-acting, oil-lubricated machines that sit under a workbench, in a garage, in a dental surgery or inside a piece of equipment, and that are made and sold in very large numbers. It specifies the requirements, the test methods, the inspection rules, and the marking, packaging, transport and storage of air-cooled, single-acting, general purpose oil-lubricated miniature reciprocating piston air compressors. A standard for small compressors has a particular job to do, which is to make the ratings mean something. Compressors of this size are sold to non-specialists on a headline figure, and the figure most often quoted - the displacement, the volume the piston sweeps - is not the volume of air the machine actually delivers, which is lower and depends on the pressure. The standard therefore specifies the free air delivery at stated pressures as the rating, together with the conditions under which it is measured, which is what allows two machines to be compared honestly. Around it sit the requirements that determine whether the machine lasts: the pressure ratings and the setting of the safety valve, the temperature rise and the cooling, the oil consumption and the oil carry-over into the delivered air - which matters greatly if the air is used for spraying or for instruments - the leak tightness, the noise, the vibration, the electrical safety and the motor protection, the receiver where one is fitted, and the endurance run. The safety provisions are those of a small pressure vessel with a hot machine on top of it, in a domestic or light commercial setting where nobody inspects anything. Issued on 9 October 2015 and in force since 1 June 2016, it replaces GB/T 13928-2002.

This standard specifies the air-cooled, single-acting, general purpose oil-lubricated micro reciprocating piston air compressor (hereinafter referred to as "compressor") of Type and basic parameters, requirements, test methods, inspection rules and signs, packaging and storage requirements. This standard applies to the rated power of the motor or equivalent power of 0.18kW ~ 15kW engine driven, rated discharge pressure Not more than 1.4MPa

air compressor. This standard also applies to the rated power of 18.5kW, rated discharge pressure of 0.5MPa air compressor.

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/T 1149 (all parts) Piston Ring

GB/T 3853 displacement compressors Acceptance Test

GB/T 4975 General term displacement compressors

GB/T 4980 Determination of volumetric compressor noise

GB/T 5330-2003 industrial woven square hole wire mesh

GB/T 7777 displacement compressors mechanical vibration measurement and evaluation

GB/T 9438 aluminum alloy castings

GB/T 9440 Malleable Iron Castings GB/T 13306 signs

GB/T 15487 displacement compressor flow measurement method

GB 19153 displacement air compressors energy efficiency limit value and energy efficiency rating

GB 22207 Safety requirements for displacement air compressors

JB/T 2231.4 reciprocating piston compressor parts - Part 4. Metal annular valve

JB/T 2589 model designation displacement compressors

3 Terms and Definitions

GB/T 4975, the terms and definitions JB/T 9107 defined apply to this document.