Technical Data sheet

Air Compressor

◆ Product Description

A rotary screw air compressor is an industrial power equipment designed based on the positive displacement compression principle. Through the high-speed rotation of a pair of intermeshing screw rotors, it realizes the suction, compression and discharge of air, and is widely used as a power source supply for pneumatic systems in various industries.

- Super Class 1 Energy Efficiency, Significant Energy Saving & Consumption Reduction
- Low Noise & Stable Operation, High Operational Reliability
- Intelligent Control, Efficient & Convenient O&M
- Multi-Scenario Adaptability, Flexibly Meeting Diverse Needs
- Clean Air Output, Protecting Downstream Equipment

◆ Product Structure

- The product structure of rotary screw air compressors is designed around the core concepts of efficient compression, clean output, stable operation, and intelligent control & management. It is mainly composed of a core compression system, power transmission system, oil-gas separation and purification system, cooling system, intelligent control system, and auxiliary protection system. All components work synergistically to achieve air suction, compression, purification, and stable output.

◆ Typical Applications

- With diverse machine models and flexible specification configurations, rotary screw air compressors are widely suitable for multi-field scenarios: They not only meet the continuous air supply needs of pneumatic tools and automated equipment in general manufacturing production lines, but also comply with the high cleanliness standards of the food, pharmaceutical, and electronic semiconductor industries through oil-free clean models. In complex working conditions such as chemical and mining industries, explosion-proof and corrosion-resistant models can withstand flammable, explosive, and corrosive environments; in construction and infrastructure scenarios, mobile units are adapted for outdoor water-free operations; for large-scale factory parks, cluster frequency conversion units achieve large-scale centralized air supply and waste heat recovery. They fully cover various pneumatic power supply needs from industrial production to commercial services.

◆ Typical Product Data and Physical Properties

Rotor Material: High-Strength Alloy Steel
Main Unit/Motor Casing Material: Cast Iron
Compression Stage: Single-Stage Compression / Fixed Frequency
Working Pressure: 0.75 MPa
Minimum Rated Displacement: 10.0 m³/min
Nominal Motor Power: 55 kW
Cooling Method: Air-Cooled Type
Voltage: 380V-3ph-60Hz / 460V-3ph-60Hz
Connection Port: DN65
Density: 7.85 g/cm³
Tensile Strength: ≥ 980 MPa
Temperature Resistance Range: -20℃ to 120℃

Availability:

Item#	Compression Stage	Working Pressure	Nominal Motor Power	Cooling Method	Voltage	Connection Port
1.4.24.01.0114	Single-Stage Compression / Fixed Frequency	0.75MPa	55KW	Air-Cooled Type	380V-3ph-60Hz	DN65
1.4.24.01.1030	Single-Stage Compression / Fixed Frequency	0.75MPa	55KW	Air-Cooled Type	460V-3ph-60Hz	DN65

◆ Technical and Application Assistance

HORB provides a technical hotline to answer your technical and application related questions.

◆ Note:

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly. HORB data is for reference purposes only.