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## SCREW AIR COMPRESSOR

Oil-injected / VSD / PM / Two-stage/All In One Screw Air Compressor

**RISAN**  
RISAN COMPRESSOR CO.,LTD.



## About us

Risan Compressor Co., Ltd. is located in Wenling City, Zhejiang Province, founded in 2017 has a registered capital of 50 million yuan and an area of more than 50000 square meters. We focus on the production of energy saving and high efficiency screw air compressors, committing to be a good example of manufacturing high quality compressor.

The company has 2 senior engineers, 3 R&D engineers, 2 design engineers and more than 200 experienced employee now, with design production capacity of 4000 units per month. We have numerical control turret punch press, CNC bending machine, laser cutting machine, automatic spraying line, semi-automatic welding line, robot welding station, automatic assembly line, automatic material warehouse, testing machine and other advanced equipment to guarantee efficient production and excellent quality.



All the time, we stick in the spirit of innovation and development. We promise that we will provide customers with high-tech, high-quality and cost-effective products.

### ④ Quality First

The design and production are strictly implemented ISO9001 and ISO14001 standards, stable, reliable and long life, fully embody the most advanced manufacturing technology.

### ④ Easy installation, Easy operation

The product is filled with lubricating oil before delivery, it can run immediately after installation. By the LCD screen, you can easily get machine's operating status.

### ④ Space-saving, Safety and Eco-friendly

The product has compact structure, small size, small footprint, and low operating noise. It can be installed wherever it is needed, even placed in the production area.

### ④ Factory test

We have the most advanced computer test system, each air compressor is tested under different operating conditions to ensure your air compressor can get the best performance under various conditions. Performance test, test content includes operating data and alarm protection system to ensure that every machine shipped from the factory is safe and reliable.

### ④ Reduce costs, Save energy

The product uses EPC intelligent control system and automatic loading/unloading adjustment to ensure the air compressor can run according to the air requirement, stop automatically when not in use, eliminate waste, reduce energy consumption, and reduce the running cost of the machine.

## Risan Oil-injected Screw Air Compressor

Energy-saving, High Efficiency, Stable and Durable

### Product Features

#### ④ Superior electrical control system and maintenance instructions

With the microcomputer control system each unit have self-diagnosis and protection functions. Control panel can show the actual operation of the unit. If a failure occurs, the microcomputer control system will respond accordingly to different situations. Connect the compressors with a computer can achieve multiple chain control and remote control, make sure to work 24 hours a day.

#### ④ Reduce air leakage

##### Reduce air leakage

At high speed, more air is leaked through the rotor during the compression process. In short, the faster the rotor turns, the more difficult it is to seal the air. Precision machining of the rotor can not make up for this defect, so the air end should be large diameter and low speed to achieve high energy efficiency.

#### ④ Reduce lubricant resistance

##### Large capacity, high efficiency

Inside the air end, rotors deliver the lubricating oil with heat. In fact, the lower the speed, the less resistance the oil has to the rotor. In addition, the lubricating oil should be injected into the compression chamber at a suitable location to minimize the viscous forces and provide the best cooling effect.

Make the compressor smaller and use high speed is to reduce costs. But the air end should be large diameter and low speed to achieve high energy efficiency.

#### ④ Smaller leakage area

We achieve the smallest leakage area by high-accuracy design, improve the efficiency.

#### ④ Excellent cooling device

The cooler is specially designed for high temperature and high humidity areas, not only increases the heat exchange capacity by more than 10%, but also strengthens the material structure and resistance to acid and alkali treatment. As the moisture in the oil is removed, the screw operates

#### Durable large sized bearing

We use durable, large sized bearings to meet large diameter air end, to achieve superior performance and long lifespan.

more smoothly and the bearing life is extended. And it also has the function of low-temperature automatic adjustment compensation, make it suitable for areas with large temperature difference between winter and summer.



### Oil-injected Screw Air Compressor Parameters

Model Parameter	RS7A	RS10A	RS15A	RS20A	RS25A	RS30A	RS40A	RS50A	RS60A	RS75A							
Air delivery/ Discharge pressure (m³/min)/Mpa	0. 8/0. 7	1.2/0.7	1.65/0.7	2.5/0.7	3.2/0.7	3.8/0.7	5.3/0.7	6.8/0.7	7.4/0.7	10/0.7							
	0. 78/0. 8	1.1/0.8	1.5/0.8	2.3/0.8	3.0/0.8	3.6/0.8	5.0/0.8	6.2/0.8	7.0/0.8	9.6/0.8							
	0. 62/1.0	0.95/1.0	1.3/1.0	2.1/1.0	2.7/1.0	3.2/1.0	4.5/1.0	5.6/1.0	6.2/1.0	8.5/1.0							
	0. 5/1.2	0.8/1.2	1.1/1.2	1.72/1.2	2.4/1.2	2.7/1.2	4.0/1.2	5.0/1.2	5.6/1.2	7.6/1.2							
Lubricating oil capacity (L)	10				18				30	65							
Noise dB(A)	66 ± 2				68 ± 2				72 ± 2								
Driving mode	Belt driven	Direct link															
Power Supply	380V/50Hz Customizable																
Power (kw/hp)	5. 5/7	7. 5/10	11/15	15/20	18. 5/25	22/30	30/40	37/50	45/60	55/75							
Startup mode	Y-△ Start																
Fan power(kw)	0. 07	0. 15	0. 26	0. 26	0. 38	0. 38	0. 38	0. 75	0. 75	1. 5							
Fan air flow(m³/min)	24	39	75	75	107	107	107	107	182	182							
Safety Protection	Over Current Protection, Safety Valve, Relief Valve, High Discharge Temperature & Pressure Protection, Phase Loss/Phase Reverse/Phase Sequence Monitoring																
Size	L mm	760	880	1080		1280		1400		1680							
	W mm	600	670	750		850		1000		1230							
	H mm	780	880	1000		1160		1290		1570							
Weight(kg)	200	240	400		550	600		800		1660							
Output pipe diameter	G 1/2		G 3/4		G1		G1-1/2		G2								

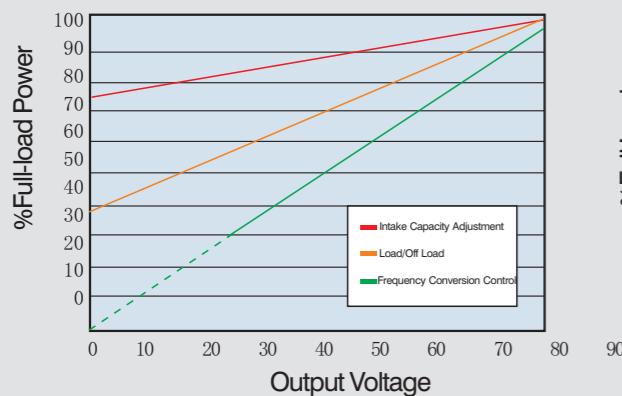
Model Parameter	RS100A	RS125A	RS150A	RS175A	RS200A	RS250A	RS300A	RS350A	RS430A	RS480A								
Air delivery/ Discharge pressure (m³/min)/Mpa	13.4/0.7	16.2/0.7	21/0.7	24.5/0.7	28.7/0.7	32/0.7	36/0.7	42/0.7	51/0.7	64/0.7								
	12.6/0.8	15.0/0.8	19.8/0.8	23.2/0.8	27.6/0.8	30.4/0.8	34.3/0.8	40.5/0.8	50.2/0.8	61/0.8								
	11.2/1.0	13.8/1.0	17.4/1.0	20.5/1.0	24.6/1.0	27.4/1.0	30.2/1.0	38.2/1.0	44.5/1.0	56.5/1.0								
	10.0/1.2	12.3/1.2	14.8/1.2	17.4/1.2	21.5/1.2	24.8/1.2	27.7/1.2	34.5/1.2	39.5/1.2	49/1.2								
Lubricating oil capacity (L)	65	72	90		110		125	150										
Noise dB(A)	72 ± 2			75 ± 2			82 ± 2			84 ± 2								
Driving mode	Direct link																	
Power Supply	380V/50Hz Customizable																	
Power (kw/hp)	75/100	90/125	110/150	132/175	160/200	185/250	220/300	250/350	315/430	355/480								
Startup mode	Y-△ Start																	
Fan power(kw)	1. 5	2. 2	0. 75*2	0. 75*2	Customized													
Fan air flow(m³/min)	182	270	500	500	Customized													
Safety Protection	Over Current Protection, Safety Valve, Relief Valve, High Discharge Temperature & Pressure Protection, Phase Loss/Phase Reverse/Phase Sequence Monitoring																	
Size	L mm	1840		2400		3150												
	W mm	1230		1470		1980												
	H mm	1570		1840		2150												
Weight(kg)	1800	1900	2500	2700	3000	3500	4000	4500	6000	6500								
Output pipe diameter	G2		G2-1/2		DN80		DN100											

## Risan Permanent Magnet Variable Frequency Screw Air Compressor

Newest Technology, Excellent Frequency Conversion System

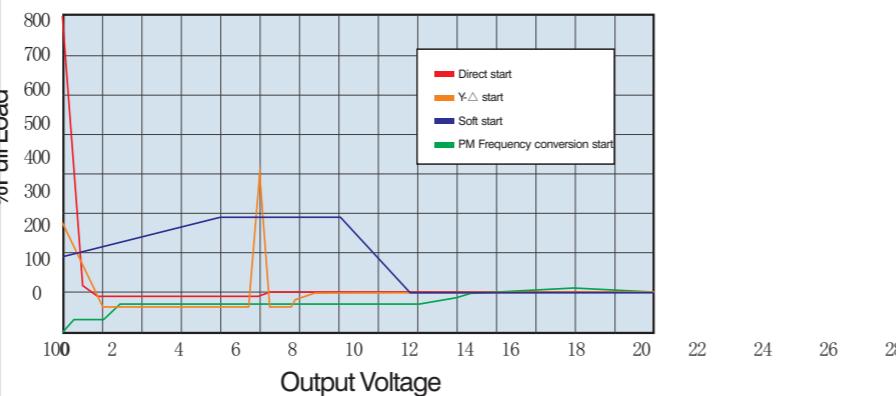
### Energy Saving Control

The permanent magnet variable frequency air compressor provides 30-100% linear no-step volume control. According to the change of the customer's compressed air requirement, the power consumption can be automatically controlled, which can significantly reduce the operating cost by up to 35%.



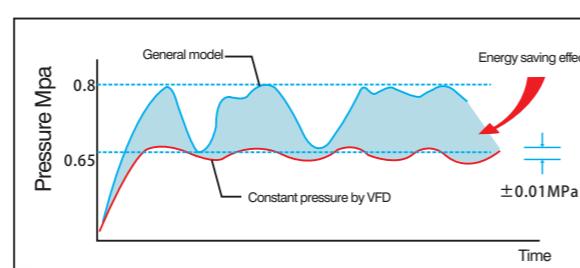
### Frequency Conversion Start

The figure shows a comparison of several startup methods. It can be seen that the permanent magnet variable frequency start is slow, and it is more stable than the soft start, completely avoiding current peaks. Operate variable frequency conversion after reach rated pressure, can make stepless adjustment through pressure detection, output constant pressure as required, eliminates the consumption of continual loading and unloading control.



### Energy Saving By Constant Pressure

The figure shows the pressure comparison between ordinary air compressor and PM variable frequency air compressor. The ordinary air compressor will be frequently loaded and unloaded between the demand pressure and pressure 1.5kg higher, which will cost an extra 10.5% power consumption than PM variable frequency air compressor that stable in demand pressure(7% more power consumption per 1kg pressure increase). Moreover, it will cost 45% energy when the compressor is idling. Therefore, the constant pressure supply not only reduce electricity consumption, but also extend lifespan of the machine and eliminate the adverse effects of unstable pressure.



## Magnet Variable Frequency Screw Air Compressor Parameters

Model Parameter	RS10E	RS15E	RS20E	RS25E	RS30E	RS40E	RS50E	RS60E	RS75E	RS100E
Air delivery/ Discharge pressure (m³/min)/Mpa	1.2/0.7	1.65/0.7	2.5/0.7	3.2/0.7	3.8/0.7	5.3/0.7	6.8/0.7	7.4/0.7	10/0.7	13.4/0.7
	1.1/0.8	1.5/0.8	2.3/0.8	3.0/0.8	3.6/0.8	5.0/0.8	6.2/0.8	7.0/0.8	9.6/0.8	12.6/0.8
	0.95/1.0	1.3/1.0	2.1/1.0	2.7/1.0	3.2/1.0	4.5/1.0	5.6/1.0	6.2/1.0	8.5/1.0	11.2/1.0
	0.8/1.2	1.1/1.2	1.72/1.2	2.4/1.2	2.7/1.2	4.0/1.2	5.0/1.2	5.6/1.2	7.6/1.2	10.0/1.2
Lubricating oil capacity (L)	10				18			30		65
Noise dB(A)	66 ± 2			68 ± 2					72 ± 2	
Driving mode						Direct link				
Power Supply						380V/50Hz Customizable				
Power (kw/hp)	7.5/10	11/15	15/20	18.5/25	22/30	30/40	37/50	45/60	55/75	75/100
Startup mode						Y-△ Start, Frequency conversion start				
Fan power(kw)	0.15	0.26	0.26	0.38	0.38	0.38	0.75	0.75	1.5	1.5
Fan air flow(m³/min)	39	75	75	107	107	107	107	182	182	182
Safety Protection						Over Current Protection, Safety Valve, Relief Valve, High Discharge Temperature & Pressure Protection, Phase Loss/Phase Reverse/Phase Sequence Monitoring				
Size	L mm	880			1120			1280		1800
	W mm	670		750		850		1000		1230
	H mm	920		1000		1160		1290		1570
Weight(kg)	200	350		500		550		750	1600	1800
Output pipe diameter	G 1/2	G 3/4		G1		G1-1/2		G2		

Model Parameter	RS125E	RS150E	RS175E	RS200E	RS250E	RS300E	RS350E	RS430E	RS480E	RS540E
Air delivery/ Discharge pressure (m³/min)/Mpa	16.2/0.7	21/0.7	24.5/0.7	28.7/0.7	32/0.7	36/0.7	42/0.7	51/0.7	64/0.7	71.2/0.7
	15.0/0.8	19.8/0.8	23.2/0.8	27.6/0.8	30.4/0.8	34.3/0.8	40.5/0.8	50.2/0.8	61/0.8	68.1/0.8
	13.8/1.0	17.4/1.0	20.5/1.0	24.6/1.0	27.4/1.0	30.2/1.0	38.2/1.0	44.5/1.0	56.5/1.0	62.8/1.0
	12.3/1.2	14.8/1.2	17.4/1.2	21.5/1.2	24.8/1.2	27.7/1.2	34.5/1.2	39.5/1.2	49/1.2	52.2/1.2
Lubricating oil capacity (L)	72	90		110		125		150		180
Noise dB(A)	72 ± 2		75 ± 2			82 ± 2			84 ± 2	
Driving mode					Direct link					
Power Supply					380V/50Hz Customizable					
Power (kw/hp)	90/125	110/150	132/175	160/200	185/250	220/300	250/350	315/430	355/480	400/540
Startup mode					Y-△ Start, Frequency conversion start					
Fan power(kw)	2.2	0.75*2	0.75*2						Customized	
Fan air flow(m³/min)	270	500	500					Customized		
Safety Protection						Over Current Protection, Safety Valve, Relief Valve, High Discharge Temperature & Pressure Protection, Phase Loss/Phase Reverse/Phase Sequence Monitoring				
Size	L mm	1800		2400				3150		
	W mm	1230		1470				1980		
	H mm	1570		1840				2150		
Weight(kg)	1900	2500	2700	3000	4000	4500	6000	6500	7200	
Output pipe diameter	G2		G2-1/2			Dn85			DN100	