

# Atmospheric permanent magnet variable frequency screw air compressor

Through the pressure sensor, the permanent magnet variable frequency screw air compressor senses the actual pressure and air consumption in the system in time, and changes the speed of the air compressor through the precise control of the electrical and frequency converter, so as to adjust the system pressure to achieve the on-demand output of compressed air; when the air consumption of the system is reduced, the air compressor reduces the speed to reduce the output of compressed air, and vice versa, the motor speed is increased to increase the amount of compressed air to maintain a stable system pressure.

### Characteristics of atmospheric permanent magnet variable frequency screw air compressor

#### 1. Stable discharged pressure

The stepless adjustment characteristics of the inverter used by the permanent magnet variable frequency screw air compressor can achieve high-speed adjustment and control of the pressure through the internal adjustment of the controller or the inverter. Compared with the upper limit switch control of power frequency air compressor operation, the air pressure stability is exponentially improved.

#### 2. Start without impact

Since the inverter itself is a soft start device, the maximum starting current is about twice the rated current, and compared with the power frequency start-up is generally more than 6 times the rated current, the starting impact is very small. This impact is not only on the power grid, but also on the entire mechanical system, which can be greatly reduced.

#### 3. More energy saving

The inverter adjusts motor speed in real time according to the actual air consumption, and the air compressor can be automatically dormant when the air consumption is low, which greatly reduces the loss of energy.

#### 4. Low noise

Since the operating frequency is less than the power frequency during stable operation, the mechanical noise is reduced and the mechanical wear is small; The capacity requirement of the air tank is small.

# Atmospheric fixed speed screw air compressor

With the concept of energy saving, consumption reduction, stability and durability, the German advanced airend and production technology are adopted to ensure that the air compressor can meet the reliable, stable and continuous operation under various working conditions.

### Characteristics of atmospheric fixed speed screw air compressor

1. The airend of German technology, all models of air compressors adopt direct transmission, and the operation is more stable.

2. Optimized motor housing design, all motor designs meet international standards; the innovative rotor design reduces motor power loss by 40%. The wide range of voltage adaptation makes the compressor more energy-efficient and the supply pressure more constant.

3. World's famous brand electrical components, using silver contacts, with a life span of more than 3 million times, safe use is guaranteed for a long time.

4. PLC remotely monitors the running status and data of the equipment. Provide intelligent one-stop solutions.







## **Technical specification**

Model	ALS-08A/YC	ALS-11A/YC	ALS-15A/YC	ALS-18.5A/YC	ALS-22A/YC	ALS-30A/YC	ALS-37A/YC	ALS-45A/YC			
Air delivery(M³/min) /Discharge pressure(Mpa)	1.0/0.8 0.85/1.0 0.7/1.3	1.5/0.8 1.3/1.0 1.1/1.3	2.3/0.8 2.1/1.0 1.5/1.3	2.8/0.8 2.6/1.0 2.3/1.3	3.2/0.8 3.0/1.0 2.8/1.3	5.0/0.8 4.8/1.0 3.2/1.3	6.2/0.8 6.0/1.0 5.0/1.3	7.0/0.8 6.8/1.0 6.2/1.3			
Power (kW)	7.5	11	15	18.5	22	30	37	45			
Voltage	380V/50HZ										
Driven mode	Direct										
Lubricant volume (L)	7	10	10	18	18	18	25	25			
Noise (dB(A))	64 ± 2	64 ± 2	64 ± 2	68 ± 2	68±2	68 ± 2	72 ± 2	72±2			
Starting mode				Variable freq	uency starting						
Overall dimension (L*W*H)(mm)	760*620*840	1000*750*1020	1000*750*1020	1180*850*1160	1180*850*1160	1180*850*1160	1280*1000*1290	1280*1000*1390			
Weight (KG)	140	240	240	350	350	350	500	500			
Outlet pipe diameter	RP1/2	RP3/4	RP3/4	RP1	RP1	RP1	RP1 1/2	RP1 1/2			
Working environment temperature ( °C )	−5°C ~ +45°C										
Exhaust temperature ( °C )	≤Ambient temperature + 15℃										
Oil content (PPM)	≤3PPM										
Rotary speed	3000										

Model	ALS-55A/FYC	ALS-75A/FYC	ALS-90A/FYC	ALS-110A/FYC	ALS-132A/FYC	ALS-160A/FYC	ALS-185A/FYC	ALS-220A/FYC	ALS-250A/FYC		
Air delivery(M³/min) /Discharge pressure(Mpa)	9.2/0.8 9.0/1.0 7.0/1.3	12.2/0.8 12.0/1.0 9.2/1.3	15.0/0.8 12.2/1.0 12.0/1.3	19.8/0.8 15.0/1.0 14.5/1.3	23.2/0.8 19.0/1.0 18.9/1.3	27.6/0.8 23.2/1.0 22.6/1.3	30.4/0.8 27.6/1.0 26.0/1.3	34.3/0.8 30.4/1.0 29.5/1.3	40.5/0.8 34.3/1.0 33.8/1.3		
Power (kW)	55	75	90	110	132	160	185	220	250		
Voltage	380V/50HZ										
Driven mode	Direct										
Lubricant volume (L)	65	65	65	90	90	110	110	150	150		
Noise (dB(A))	76±2	76±2	76±2	86 ± 2	86 ± 2	86 ± 2	86±2	86 ± 2	86 ± 2		
Starting mode	Variable frequency starting										
Overall dimension (L*W*H)(mm)	1900*1250*1560	1900*1250*1560	1900*1250*1560	2300*1470*1840	2300*1470*1840	2300*1470*1840	2540*1640*1840	3200*1980*1390	3200*1980*1390		
Weight (KG)	1000	1100	1200	1600	1800	2000	2600	3600	3800		
Outlet pipe diameter	RP2	RP2	RP2	RP2 1/2	RP2 1/2	RP2 1/2	RP2 1/2	DN100	DN100		
Working environment temperature ( °C )	-5℃~+45℃										
Exhaust temperature ( °C )	≤Ambient temperature + 15℃										
Oil content ( PPM )	≤3PPM										
Rotary speed		3000									

Auliss accepts customized orders for the special industries or needs
Special voltages such as 415V, 660V, 3KV, etc. are accepted for OEM and ODM customization
Auliss continuously researches and improves its products. If the technical parameters are changed, no further notice will be given



## **Technical specification**

Model	ALS-08A	ALS-11A	ALS-15A	ALS-18.5A	ALS-22A	ALS-30A	ALS-37A	ALS-45A			
Air delivery(M³/min) /Discharge pressure(Mpa)	1.0/0.8 0.85/1.0 0.7/1.3	1.5/0.8 1.3/1.0 1.1/1.3	2.3/0.8 2.1/1.0 1.5/1.3	2.8/0.8 2.6/1.0 2.3/1.3	3.2/0.8 3.0/1.0 2.8/1.3	5.0/0.8 4.8/1.0 3.2/1.3	6.2/0.8 6.0/1.0 5.0/1.3	7.0/0.8 6.8/1.0 6.2/1.3			
Power (kW)	7.5	11	15	18.5	22	30	37	45			
Voltage	380V/50HZ										
Driven mode	Direct										
Lubricant volume (L)	7	10	10	18	18	18	25	25			
Noise (dB(A))	64 ± 2	64±2	64±2	68±2	68±2	68±2	72±2	72±2			
Starting mode	Direct starting		1	Y-	- Δ						
Overall dimension (L*W*H)(mm)	850*700*920	1000*750*1020	1000*750*1020	1180*850*1160	1180*850*1160	1350*850*1160	1500*1000*1390	1500*1000*1390			
Weight (KG)	140	240	240	350	350	450	600	600			
Outlet pipe diameter	RP1/2	RP3/4	RP3/4	RP1	RP1	RP1	RP1/2	RP1 1/2			
Working environment temperature ( °C )	-5°C ~+45°C										
Exhaust temperature ( °C )	≪Ambient temperature + 15℃										
Oil content (PPM)	≤3PPM										
Rotary speed	2960										

Model	ALS-55A	ALS-75A	ALS-90A	ALS-110A	ALS-132A	ALS-160A	ALS-185A	ALS-220A	ALS-250A		
Air delivery(M³/min) /Discharge pressure(Mpa)	9.2/0.8 9.0/1.0 7.0/1.3	12.2/0.8 12.0/1.0 9.2/1.3	15.0/0.8 12.2/1.0 12.0/1.3	19.8/0.8 15.0/1.0 14.5/1.3	23.2/0.8 19.0/1.0 18.9/1.3	27.6/0.8 23.2/1.0 22.6/1.3	30.4/0.8 27.6/1.0 26.0/1.3	34.3/0.8 30.4/1.0 29.5/1.3	40.5/0.8 34.3/1.0 33.8/1.3		
Power (kW)	55	75	90	110	132	160	185	220	250		
Voltage	380V/50HZ										
Driven mode	Direct										
Lubricant volume (L)	65	65	65	90	90	110	110	150	150		
Noise (dB(A))	76±2	76±2	76±2	86 ± 2	86±2	86±2	86±2	86±2	86±2		
Starting mode					Y-∆						
Overall dimension (L*W*H)(mm)	1900*1250*1560	1900*1250*1560	1900*1250*1560	2300*1470*1840	2300*1470*1840	2300*1470*1840	2540*1640*1840	3200*1980*2150	3200*1980*2150		
Weight (KG)	1000	1100	1200	1600	1800	2000	2600	3600	3800		
Outlet pipe diameter	RP2	RP2	RP2	RP2 1/2	RP2 1/2	RP2 1/2	RP2 1/2	DN100	DN100		
Working environment temperature ( °C )	-5℃~+45℃										
Exhaust temperature ( °C )	<ambient +="" 15℃<="" td="" temperature=""></ambient>										
Oil content (PPM)	≤3PPM										
Rotary speed	2960										

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