





Elang Screw compressor series



ELANG INDUSTRIAL(SHANGHAI)CO.,LTD

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Power frequency screw compressor series





Oil-gas Tank

Adopt three-stage separation methods (cyclone separation, sedimentation and precision filtration) to ensure the oil content of the outlet compressed air less than 3ppm.



Air End

High driving efficiency, significantly reduce the energy consumption and vibration. Reduce the leakage area to increase the efficiency by 15%, to make the air delivery greatly increased.

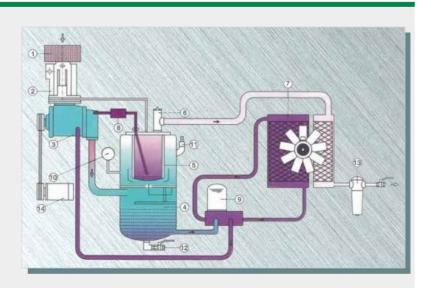


Intake Valve

High quality intake valve can made the air delivery by 0~100% stepless adjustment according to the air consumption, to reduce energy consumption. One way valve installed in the intake valve to prevent oil and gas return in case of sudden shutdown. Varieties of valves can be used for all kinds of stationery and portable compressors.

Illustrative diagram

- 1 Air filter
- 8 Check valve
- 2 Intake valve
- 9 Oil filter
- 3 Air end
- 10 Pressure gauge
- 4 Oil gas tank
- ⋄ 5 Oil separator
- 12 Drain valve
- 6 Minimum pressure valve
- 13 Moisture separator
- 7 After cooler
- 14 Main motor





Parameters (Power frequency)

Model	ERCC -10SA	ERCC -15SA	ERCC -20SA	ERCC -25SA	ERCC -30SA	ERCC -40SA	ERCC -50SA	ERCC -60SA	ERCC -75SA	ERCC -100SA	ERCC -120SA	
Air delivery/working	1.2/0.7	1.6/0.7	2.5/0.7	3.2/0.7	3.8/0.7	5.0/0.8	6.8/0.7	7.0/0.8	10.0/0.7	13.5/0.7	16.1/0.7	
	1.0/0.8	1.5/0.8	2.3/0.8	2.9/0.8	3.6/0.8	4.5/1.0	6.2/0.8	6.2/1.0	9.1/0.8	12.6/0.8	15.0/0.8	
pressure	0.9/1.0	1.3/1.0	2.1/1.0	2.6/1.0	3.2/1.0	3.8/1.2	5.6/1.0	5.6/1.2	8.5/1.0	11.2/1.0	13.8/1.0	
	0.7/1.2	1.1/1.2	1.9/1.2	2.2/1.2	2.8/1.2	5.2/0.7	4.9/1.2	7.3/0.7	7.6/1.2	10.0/1.2	12.5/1.2	
Power	7.5	11	15	18.5	22	30	37	45	55	75	90	
Driven method	Belt / Driver driven	Driver driver										
Pipe diameter	1/2"	3/4"	3/4"	1"	11/4"	11/4"	11/2"	11/2"	2"	2"	2"	
Noise	55	56	57	58	58	60	60	63	65	67	71	
Out temperature	Ambient temperature+15 ℃											
					Overall dim	ension						
L	800	1080	1080	1380	1380	1380	1500	1500	1900	1900	1900	
W	700	750	750	850	850	850	1000	1000	1250	1250	1250	
Н	930	1000	1000	1160	1160	1160	1330	1340	1570	1570	1570	
Total weight	260	400	400	500	500	500	800	800	1100	1250	1450	
Cooling method	Air cooling or water cooling											

Model	ERCC -150SA	ERCC -175SA	ERCC -200SA	ERCC -270SA	ERCC -330SA	ERCC -375SA	ERCC -420SA	ERCC -470SA	ERCC -550SA	ERCC -600SA	ERCC -670SA
	21.0/0.7	25.2/0.7	28.7/0.7	34.5/7	43.0/7	51.0/7	56.0/7	64.0/7	73.0/7	81.0/7	89.0/7
	19.8/0.8	24.0/0.8	27.6/0.8	33.0/8	40.0/8	50.0/8	55.0/8	62.0/8	70.0/8	79.0/8	87.0/8
Air delivery/working pressure	17.4/1.0	22.0/1.0	25.6/1.0	28.0/10	37.0/10	45.0/10	49.0/10	54.0/10	61.0/10	70.0/12.2	87.0/8
	15.8/1.2	20.0/12.0	22.5/1.2	23.5/12	32.0/12	37.0/12	41.0/12	46.0/12	52.0/12	59.0/12	87.0/8
Power	110	132	160	200	250	280	315	355	400	450	500
Driven method	Driver driven										
Pipe diameter	2.5"	2.5"	2.5"	Dn80	Dn100	Dn125	Dn125	Dn150	Dn150	Dn175	Dn200
Noise	72	73	75	77	78	78	80	83	85	85	85
Out temperature				Α	mbient tempe	erature+15°C					
					Overall dime	nsion					
L	2500	2500	2500	3300	3300	4000	4600	4600	5000	5500	5500
W	1470	1470	1470	2200	2200	2000	2300	2300	2350	2590	2590
Н	1640	1840	1840	2000	2000	2100	2400	2400	2400	2800	2800
Total weight	2350	2350	3550	4100	4750	5000	6150	8100	8500	8500	9500
Cooling method	Air cooling or water cooling										



As one of the world's largest air compressor system suppliers, ELANG currently develops these products: Rotary Screw Air Compressor Series, 100% Pure Oil-free Air Compressor Series, Medium /Low Pressure Screw Air Compressor Series, Combined Screw Air pressure Series, Variable Frequency Screw Air Compressor Series that can save energy max 30%, Steam Turbine Air Compressor Series, Heat Recovery Screw Air Compressor Series and matched after treatment equipment etc.

German standard, Made in ELANG. As the industry's leading technology enterprise, ELANG has always being focused on the talent cultivation and quality pursuit. We have a good batch of talent team with solid foundation of air dynamics and always active in mechanical application and technology R&D, that make ELANG achieve unparalleled advantages in the technology R&D and product innovation and customized etc.

ELANG obtains rapid development based on innovation and scientific research and win great attention of the industry. ELANG invests 10% of annual profit for product research and development, and is the first one to create its own energy efficiency laboratory. Our compressors have obtained the national GC level energy efficiency certification, and we have achieved product airflow 15% higher than the same industry, and some products up to 30% energy saving.

At present, with Shanghai production base as the core, ELANG has established the production, sales and service networks, that radiating 34 provincial-level administrative districts and more than 100 countries. ELANG brand impact throughout the world. In 2016, ELANG total sales exceeded 100 million RMB.

Behind such a huge system, it is ELANG people constant persist. Choose ELANG, without worry for fifty years. ELANG give 10 years quality guaranty concept

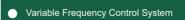
for its sold products, 24-hour after-sales service, full-way after-sales tracking and lifelong maintenance.

ELANG, made the cleanest aerodynamic!









To adjust the rotation speed of motor via frequency converter, so as to adjust the air delivery according the air consumption, and control the pressure of pipeline system, for better energy saving efficiency.



Intelligent PLC

Touch screen with multiple language for choose, for better monitoring and protecting the equipment. Automatically regulate the load rate. High integration. High reliability. With RS-485 communication function, to achieve remote/local operation mode for optional. With auto restart function after power failure for difference operation conditions.



High Efficiency PM Motor

Motor of F grade insulation with imported long service life bearing, with service factory 1.2 for super security. No demagnetization even at 180 ℃. Track the load power to change the rotation speed, and achieve high efficiency running.

Low Noise

Dedicated intake valve special designed for variable frequency compressor and the permanent magnet motor (hereinafter called "PM motor") with no starting impact to the power grid are adopted, to ensure the compressor running stable during loading, and small starting current, making the mechanical rotation with less noise.

High Precision

According to the demand of air consumption, the output speed of the PM motor is driven by the system operation to achieve the corresponding air flow rate. Permanent magnet compressor adopts the high performance PM motor and driver, and the open loop control, to make the system accuracy be higher and the corresponding time be shorter through the adjustment of the feedback system, which provides faster system response time and stability , and keeps the air in the gas supply pipe system accurate to a certain pressure constantly operation

High Efficiency

The PM motor can speed up to the necessary rotation speed to provide the required pressure value. No slow loading process and extra power loss during loading.

Generally, variable frequency compressors adjust the rotation speed to achieve constant pressure during 50%-100% rated speed, when the speed is less than 50% and the pressure exceeds the set value, the compressor will start unloading and motor idling. PM motor has big frequency adjustment range, it can use 10% to 100% rated rotation speed under constant pressure. When the rotation speed drops to 10% and below, the compressor will go into hibernation. Restart the compressor then it can quickly enter the effective working speed.

Anti-interference

The energy consumption of PM variable frequency compressor is according to the air consumption so there is no energy loss. Moreover, the PM variable frequency compressor has low rotation speed in PM motor, no frequently loading and unloading, and constant pressure. Dedicated frequency converter is adopted, which has anti-interference function and can run continuously.

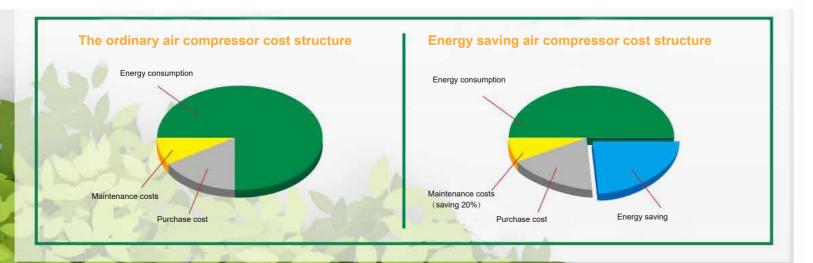
More Stable

In conditions of voltage fluctuation, load fluctuations, electromagnetic interference, as well as other special operation conditions, PM motor can maintain stable operation and guarantee a certain performance indicators, reliable, and easy to maintenance and service, combined with scientific design, no vibration, low noise, sustainable running smoothly in a few hours.

More Energy Saving

High torque and high efficiency PM motor is adopted to adjust the current according to actual load and minimize the heat, and make the power output capacity reach 100%, to exert maximum energy conversion rate in most compact space, and achieve high efficiency and energy saving. The average energy saving of variable frequency compressor is about 25% compared with the standard unit, while the energy saving of PM VSD compressor is above 35%.

Cost structure comparison



Parameters (Variable Frequency)

Model	ERCE -10SA	ERCE -15SA	ERCE -20SA	ERCE -25SA	ERCE -30SA	ERCE -40SA	ERCE -50SA	ERCE -60SA	ERCE -75SA	ERCE -100SA	ERCE -120SA
	1.2/0.7	1.6/0.7	2.5/0.7	3.2/0.7	3.8/0.7	5.0/0.8	6.8/0.7	7.0/0.8	10.0/0.7	13.5/0.7	16.1/0.7
Air delivery/working	1.0/0.8	1.5/0.8	2.3/0.8	2.9/0.8	3.6/0.8	4.5/1.0	6.2/0.8	6.2/1.0	9.1/0.8	12.6/0.8	15.0/0.8
pressure	0.9/1.0	1.3/1.0	2.1/1.0	2.6/1.0	3.2/1.0	3.8/1.2	5.6/1.0	5.6/1.2	8.5/1.0	11.2/1.0	13.8/1.0
	0.7/1.2	1.1/1.2	1.9/1.2	2.2/1.2	2.8/1.2	5.2/0.7	4.9/1.2	7.3/0.7	7.6/1.2	10.0/1.2	12.5/1.2
Power	7.5	11	15	18.5	22	30	37	45	55	75	90
Driven method	Belt / Driver driven				Driver	driven					
Pipe diameter	1/2"	3/4"	3/4"	1"	11/4"	11/4"	11/2"	11/2"	2"	2"	2"
Noise	55	56	57	58	58	60	60	63	65	67	71
Out temperature				A	Ambient tempe	erature+15°C					
					Overall dime	nsion					
L	800	1080	1080	1380	1380	1380	1500	1500	1900	1900	1900
W	700	750	750	850	850	850	1000	1000	1250	1250	1250
Н	930	1000	1000	1160	1160	1160	1330	1340	1570	1570	1570
Total weight	260	400	400	500	500	500	800	800	1100	1250	1450
Cooling method				A	Air cooling or v	vater cooling					

Model	ERCE -150SA	ERCE -175SA	ERCE -200SA	ERCE -270SA	ERCE -330SA	ERCE -375SA	ERCE -420SA	ERCE -470SA	ERCE -550SA	ERCE -600SA	ERCE -670SA
A: 1 F: / 1:	21.0/0.7	25.2/0.7	28.7/0.7	34.5/7	43.0/7	51.0/7	56.0/7	64.0/7	73.0/7	81.0/7	89.0/7
	19.8/0.8	24.0/0.8	27.6/0.8	33.0/8	40.0/8	50.0/8	55.0/8	62.0/8	70.0/8	79.0/8	87.0/8
Air delivery/working pressure	17.4/1.0	22.0/1.0	25.6/1.0	28.0/10	37.0/10	45.0/10	49.0/10	54.0/10	61.0/10	70.0/12.2	77.0/10
	15.8/1.2	20.0/12.0	22.5/1.2	23.5/12	32.0/12	37.0/12	41.0/12	46.0/12	52.0/12	59.0/12	67.0/12
Power	110	132	160	200	250	280	315	355	400	450	500
Driven method	Driver driven										
Pipe diameter	2.5"	2.5"	2.5"	Dn80	Dn100	Dn125	Dn125	Dn150	Dn150	Dn175	Dn200
Noise	72	73	75	77	78	78	80	83	85	85	85
Out temperature	Ambient temperature+15 ℃										
	Overall dimension										
L	2500	2500	2500	3300	3300	4000	4600	4600	5000	5500	5500
W	1470	1470	1470	2200	2200	2000	2300	2300	2350	2590	2590
Н	1640	1840	1840	2000	2000	2100	2400	2400	2400	2800	2800
Total weight	2350	2350	3550	4100	4750	5000	6150	8100	8500	8500	9500
Cooling method	Air cooling or water cooling										