



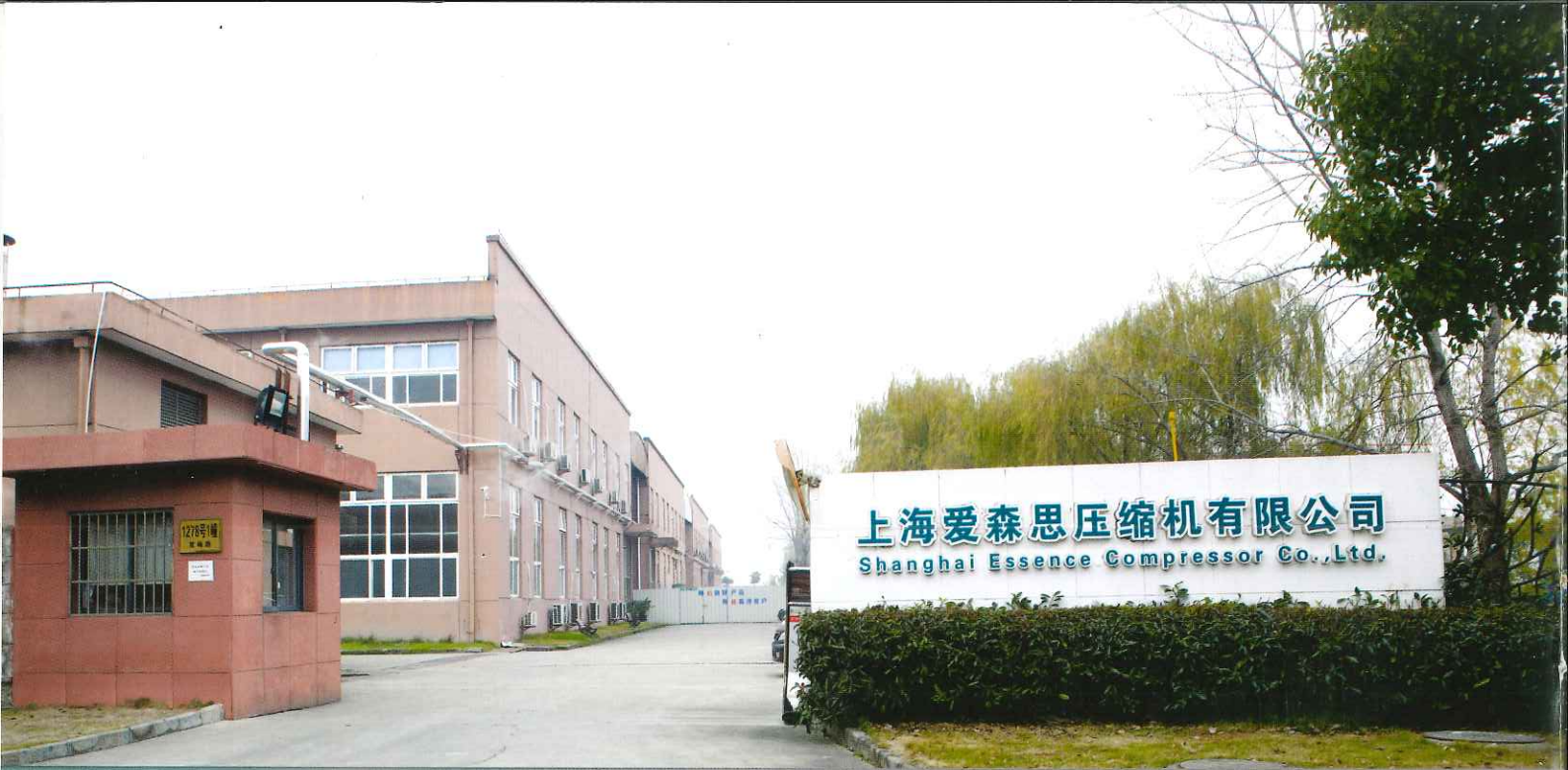
ES

Screw Air Compressors

ESSENCE™
www.essenceproducts.com

Screw Compressors Range





ABOUT US

Shanghai ESSENCE Compressor Co., Ltd. is a professional manufacturer being committed to the research, development and manufacture of screw air compressor since acquisition in 2007 by a global FUSHENG group. Derived from Europe, ESSENCE screw air compressors have unify the Western and Asian characteristics such as high-efficiency compressor air-ends, more compact structure designs, and less oil consumption. The intelligence control module systems and friendly panels provide self-diagnostics and turn-key operation.

Furthermore, ESSENCE has been developing, planning and producing a range of air-ends with performance superiors to the average on the market that linked with a series of main components as thermostatic valve, in-take valve and separator, making ESSENCE products reliable and durable. The high efficiency of the new air-end connected to the electrical motors in IE3 class high efficiency, which has reached a high technological standard in terms of performance and output.

ESSENCE™

www.essenceproducts.com

Screw Compressors Range

Adhering to the concept of quality first and customer foremost, ESSENCE will provide you perfect and reliable pre-sales and after-sales services.

Our professional designs and technologies will create a perfect image to impress your customers, and our cost-effective products will bring huge profits to you.



Configuration table

Machine Model	ES03-250	ES03-22T	ES03-22F
Air compressor unit	O	O	O
Refrigerated air dryer	X	X	O
Pre - filter	X	X	O
Post - filter	X	X	O
Air receiver	X	O	O

The characteristics of the screw air compressor

- High Reliability: Fewer parts & no wearing parts keep the operation reliable and machine life longer.
- Convenient Operation & Maintenance: Automotive screw air compressor enables the unattended operation.
- Well Balance: Screw air compressor has no unbalanced force, the machine with small size, light weight & limited footprint can work smoothly at high speed,
- Adaptability: Screw air compressor has forced air transmission characteristics which can keep the high efficiency in a wide range. Without changing any arrangement, it can work in various conditions.

Application fields

Air compressors can be seen in a wide array of manufacturing environments. Some industries that utilize the compressed air are automobile manufacturing, textiles, building materials, steel, nonferrous metallurgy, petrochemical, food and beverage, electronics, energy, pharmaceutical, shipbuilding, mining, light industry, and military.



Central compressed air

The range ES-F and ES identifies a series of screw air compressors with air cooling from 3 to 250KW, equipped with all the components necessary for a safety use and driven by an electrical motor in class IE3 or inverter system.

The ES-F and ES series represent the best technology of oil injection screw compressors. All our air compressors are one of the results for the environmental attention and the components used are low environmental impact.



The ES-F ranges are providing complete of :



Superior quality EU COMP

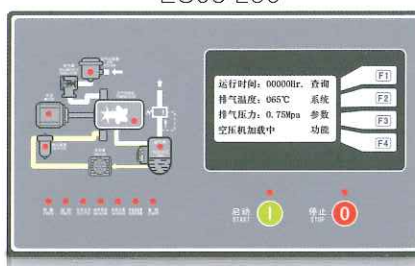
It is provided with EU COMP Germany technology, the perfect profile (5:6), less frictional resistance during rotor running, substantial reduction of energy consumption and vibration, smaller leakage area and greatly improved efficiency.

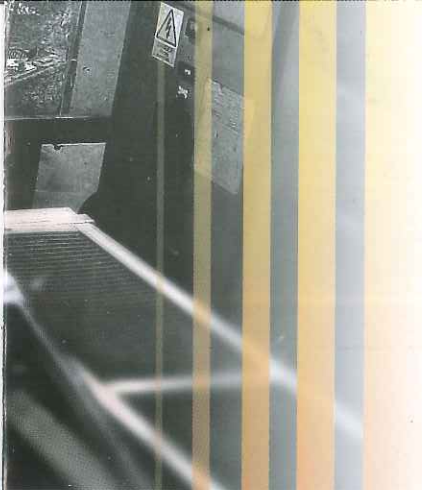


Intelligent control

The friendly human-machine interaction interface and fault self-diagnosis will not only facilitate you to make a maintenance plan but also start to save energy from the first day of using.

ES03-250





Oil Air separator

The cyclone type tank is equipped with a minimum pressure valve and safety valve. It also performs the oil collecting function, therefore, is equipped with filling & unloading connectors and oil level visual indicator. A low residual oil content (-3ppm) ensures an excellent compressed air quality. The tank lid is designed for quick and easy replacement on oil fine separator.



Leak-free sealing

The reasonable pipe fitting layout is fully considered by the designer and the unit is using a perfect sealing to avoid leakage.

Electrical motor

Asynchronous three-phase high efficiency (IE3) motor, protection IP55, isolation class F, is designed exclusively for heavy duty operation.



In-take air filter heavy duty version

Installed on all the models, the air filter removes the particles through a high-efficiency filter element.



High efficiency cooling

The initiative air cooling system has been designed and dimensioned to work perfectly in the environment temperature up to 45°C.



Air inlet regulation

The air filter system has huge filter area to minimize the pressure drop and ensure the filter precision. The high sensitivity and low-pressure drop design and backflow preventing function inlet valve optimize the air suction efficiency.



Air Compressor can be a money printer!!

When you use Essence variable speed screw air compressor, it can save the costs up to 35% annually from the compressed air system. After using 1~2 years averagely, the saved electricity fee from the compressed air system can be used to buy a new air compressor.

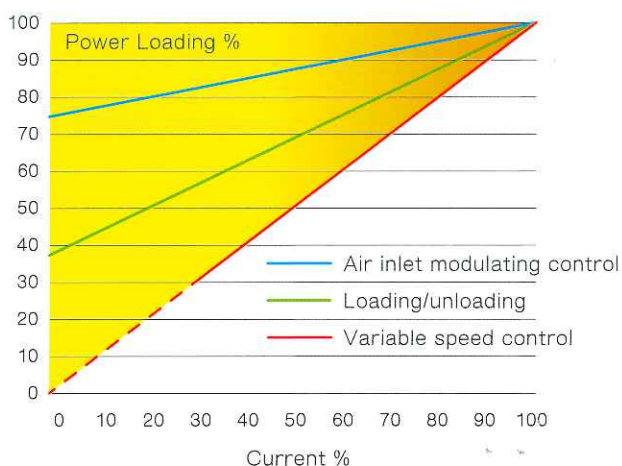
Running 8000 hours a year, with an average 70% loading

Power	15kW	22kW	37kW	55kW	75kW	90kW
Saved electricity (KWH/year)	28000	40800	69000	102400	140000	167000
Saved money USD0.1/kWH	USD2800	USD4080	USD6900	USD10240	USD14000	USD16700



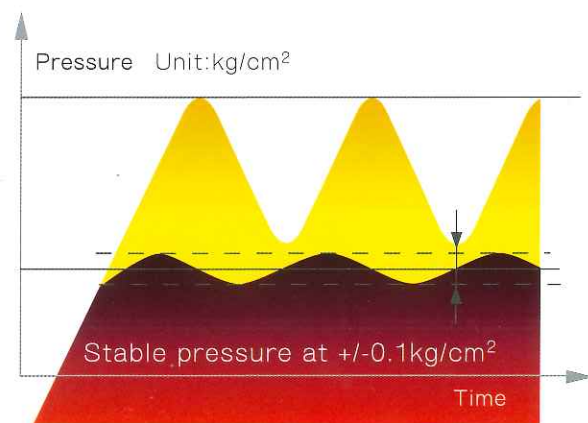
Energy-saving control

Variable speed screw air compressor provides 30%~ 100% linear stepless control which can adjust the power consumption according to the compressed air loading and save the energy from the running cost up to 35%.



Constant pressure air supply

The frequency control can react to the changing of used air volume and supply the stable air pressure under $\pm 0.1 \text{ kg/cm}^2$. Compare to the 1 ~ 2% pressure difference from loading-unloading on the traditional air compressor, it can save 7-14% electricity cost from running.



Specification

ES

Fixed speed screw air compressors

ES Machine Model				03	04	06	08	11	15	18	22	30	37	45	
Air-discharge		7bar (g)	m³/min	0.37	0.55	0.80	1.10	1.75	2.70	3.30	3.65	5.40	6.70	7.80	
		8bar (g)	m³/min	0.35	0.50	0.75	1.02	1.65	2.40	3.00	3.60	5.20	6.30	7.60	
		10bar (g)	m³/min	0.30	0.40	0.65	0.95	1.50	2.05	2.60	3.40	4.80	5.80	6.90	
		12bar (g)	m³/min	0.26	0.35	0.50	0.83	1.40	1.95	2.40	3.00	4.20	5.30	6.30	
Power			kW	3	4	5.5	7.5	11	15	18.5	22	30	37	45	
Starting method			Type	Direct starting			Star / Delta starting								
Voltage/Frequency			V/Hz	220/380/415/440V 、 50/60HZ											
Protection Level			Class	IP55											
Insulation Class			Type	F Class											
Drive Motor Efficiency			Type	IE3											
Discharge temperature			℃	≤ Ambient temperature + 15℃											
Transmission Method				Belt											
Air Outlet			in.	G1/2	G1/2	G1/2	G3/4	G3/4	G3/4	G1 1/4	G1 1/4	G1 1/2	G1 1/2	G2	
Various configuration parameters	Standard type	Length	mm	660	660	660	800	880	880	1050	1050	1000	1000	1400	
		Width	mm	600	600	600	800	830	830	880	880	1250	1250	1100	
		Height	mm	890	890	890	995	1075	1075	1260	1260	1310	1310	1600	
		Weight	kg	220	230	240	280	300	400	500	570	850	880	1080	
	Air receiver model	Tank Volume	L	200	200	200	270	270	270	300	300	—	—	—	
		Length	mm	1370	1370	1370	1500	1500	1500	1165	1165	—	—	—	
		Width	mm	600	600	600	800	830	830	925	925	—	—	—	
		Height	mm	1440	1440	1440	1510	1590	1590	1810	1810	—	—	—	
		Weight	kg	335	345	355	460	480	580	650	720	—	—	—	
	Overall performance type	Dew point	℃	2~10											—
		Tank Volume	L	200	200	200	270	270	270	500	500	—	—	—	
		Oil Water Separator		On board											—
		Length	mm	1370	1370	1370	1500	1500	1500	2060	2060	—	—	—	
		Width	mm	600	600	600	800	830	830	925	925	—	—	—	
		Height	mm	1440	1440	1440	1600	1680	1680	1810	1810	—	—	—	
		Weight	kg	425	435	445	560	580	680	800	870	—	—	—	

The data and performance were recorded according to standard ISO 1217

ES Machine Model				55/W	75/W	90/W	110/W	132/W	160/W	185/W	200/W	250/W
Air-discharge	7bar (g)	m³/min	10.70	13.80	16.00	21.00	25.20	28.70	32.00	35.10	42.50	
	8bar (g)	m³/min	9.60	13.00	15.20	19.80	24.00	27.60	30.40	33.50	42.00	
	10bar (g)	m³/min	8.80	11.70	13.60	17.00	21.00	24.60	27.40	30.20	40.60	
	12bar (g)	m³/min	8.10	10.25	12.30	15.30	18.30	21.50	24.80	26.50	36.20	
Power		kW	55	75	90	110	132	160	185	200	250	
Starting method		Type	Star / Delta starting									
Voltage/Frequency		V/Hz	220/380/415/440V 、 50/60HZ									
Protection Level		Class	IP55				IP23				IP55	
Insulation Class		Type	F Class									
Drive Motor Efficiency		Type	IE3				—				IE3	
Discharge temperature		℃	≤ Ambient temperature + 15℃									
Transmission Method			Direct									
Air Outlet		in.	G2	G2	G2	SQ Flange DN80		Flange DN80			Flange DN100	
Various configuration parameters	Standard type	Length	mm	2250	2250	2250	2300	2300	2900	2900	2900	3750
		Width	mm	1344	1344	1344	1450	1450	1600	1600	1600	2150
		Height	mm	1694	1694	1694	1750	1750	1800	1800	1800	2100
		Weight	kg	2150	2250	2450	3050	3200	4050	4300	4450	5200
	Air receiver model	Tank Volume	L	—	—	—	—	—	—	—	—	—
		Length	mm	—	—	—	—	—	—	—	—	—
		Width	mm	—	—	—	—	—	—	—	—	—
		Height	mm	—	—	—	—	—	—	—	—	—
		Weight	kg	—	—	—	—	—	—	—	—	—
	Overall performance type	Dew point	℃	—	—	—	—	—	—	—	—	—
		Tank Volume	L	—	—	—	—	—	—	—	—	—
		Oil Water Separator		—	—	—	—	—	—	—	—	—
		Length	mm	—	—	—	—	—	—	—	—	—
		Width	mm	—	—	—	—	—	—	—	—	—
		Height	mm	—	—	—	—	—	—	—	—	—
		Weight	kg	—	—	—	—	—	—	—	—	—

The data and performance were recorded according to standard ISO 1217

ESSENCE™

www.essenceproducts.com

Specification

ESV

ESV Variable Speed Screw Air Compressor

ESV Machine Model			15	18	22	30	37	45	55	75
Air-discharge	7bar (g)	m ³ /min	1.08~2.70	1.32~3.30	1.46~3.65	2.16~5.40	2.68~6.70	3.12~7.80	4.28~10.70	5.52~13.80
	8bar (g)	m ³ /min	0.96~2.40	1.20~3.00	1.44~3.60	2.08~5.20	2.52~6.30	3.04~7.60	3.84~9.60	5.20~13.00
	10bar (g)	m ³ /min	0.82~2.05	1.04~2.60	1.36~3.40	1.92~4.80	2.32~5.80	2.76~6.90	3.52~8.80	4.68~11.70
	12bar (g)	m ³ /min	0.78~1.95	0.96~2.40	1.20~3.00	1.68~4.20	2.12~5.30	2.52~6.30	3.24~8.10	4.10~10.25
Power		kW	15	18.5	22	30	37	45	55	75
Starting method		Type	Inverter							
Voltage/Frequency		V/Hz	220/380/415/440V · 50/60HZ							
Protection Level		Class	IP55							
Insulation Class		Type	F Class							
Discharge temperature		°C	≤ Ambient temperature + 15°C							
Transmission Method			Belt						Direct	
Air Outlet	in.		G3/4	G1 1/4	G1 1/4	G1 1/2	G1 1/2	G2	G2	G2
Length	mm		960	1140	1140	1000	1000	1400	2250	2250
Width	mm		930	880	880	1250	1250	1100	1344	1344
Height	mm		1075	1260	1260	1310	1310	1600	1694	1694
Weight	kg		425	530	600	900	930	1120	2220	2350

ESV Machine Model			90	110/W	132/W	160/W	185/W	200/W	250/W
Air-discharge	7bar (g)	m³/min	6.40~16.00	8.40~21.00	10.08~25.20	11.48~28.70	12.80~32.00	14.04~35.10	17.00~42.50
	8bar (g)	m³/min	6.08~15.20	7.92~19.80	9.60~24.00	11.04~27.60	12.16~30.40	13.40~33.50	16.80~42.00
	10bar (g)	m³/min	5.44~13.60	6.80~17.00	8.40~21.00	9.84~24.60	10.96~27.40	12.08~30.20	16.24~40.60
	12bar (g)	m³/min	4.92~12.30	6.12~15.30	7.32~18.30	8.60~21.50	9.92~24.80	10.60~26.50	14.48~36.20
Power		kW	90	110	132	160	185	200	250
Starting method		Type	Inverter						
Voltage/Frequency		V/Hz	220/380/415/440V 、50/60HZ						
Protection Level		Class	IP55	IP54					
Insulation Class		Type	F Class						
Discharge temperature		℃	≤ Ambient temperature + 15℃						
Transmission Method			Direct						
Air Outlet		in.	G2	SQ Flange DN80		Flange DN80			Flange DN100
Length		mm	2250	2600	2600	2900	2900	2900	3750
Width		mm	1344	1750	1750	1600	1600	1600	2150
Height		mm	1694	1850	1850	2350	2350	2350	2100
Weight		kg	2520	3150	3350	4200	4450	4600	5500

ESSENCE™

www.essenceproducts.com

Screw Compressors Range

Essence Compressor Co., Ltd.



Dealer/Sales specialist



ES-10501-112A000-E1