

SCREW AIR COMPRESSOR

UD5-630kW



Constant Quality & Professional Service

UNITED OSD, the largest air compressor manufacturer and compressed air system solution provider in the whole country, the quality of its product fully reflects the most up to date techniques. ISO9001 quality control management system and ISO14001 environmental management system are strictly followed in the process from the development, design, and manufacture to sales service of the product. The professional design and the strategy to face the procurement of specialty auxiliary manufacturers in the whole world ensures high efficiency and reliability and technical advancement of each machine, which makes the machine to have more excellent performance and reliability in similar products. The sales service teams distributed across the country will provide you, at any time, the service support of the sales consultation, application assessment, installation and operation and spare part supply.



Quality first from beginning to the end

The actual product and production process both follow the requirement of ISO9001 and ISO14001 standard. The product conforms to the requirement of environmental protection, the quality is stable, the product is safe and reliable and the service life is long, which fully reflects the most advanced manufacturing technology.

Simple in installation and easy in operation

The product is fully filled with the compressor oil before delivery and it can be put into operation by connecting the power after it is installation in position. The running status of the machine can be easily monitored by the backlight LCD.

Space saving and environmental friendly design

It is specifically designed as a compact structure and small cubage to fit into virtually any allocated space (including workshop) since it operates at an absolute minimal noise pollution.

Energy-efficient product

EPC intelligence control system and automatic loading/unloading control are used in the product to ensure that the air compressor operates as per the demand of compressed air and the machine will shutdown automatically when the compressed air is not required to reduce energy consumption and reduce the operation cost of the machine.





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Ex factory test

We have the most advanced computerized test system to test the performance of each ex factory air compressor with the requirement higher than the national standard under the different work conditions to ensure that your air compressor achieve the best performance in various work conditions. The content of the test includes the operating data and alarming protection system to ensure that each ex factory machine is safe and reliable.



2 years of quality commitment

UNITED OSD is the manufacturer that takes the lead in providing 2 years warranty for the complete machine in the industry based on the full confidence of technical capacity and product quality. You can get the comprehensive service brought by the 2 years warranty provided that you only need to purchase and use genius spare parts of UNITED OSD and carry out daily operation and maintenance as per "The Manual for Operation and Maintenance".



Toll free service hotline 400 889 6699

UNITED OSD opens up 24-hour nationwide toll free service hotline and professional technical personnel and sale and service engineers will solve your problems at any time and the follow-up service will be conducted accordingly.



Opening up of informationized service channel

The service items like new product development information, the main technical parameters of the equipment and sample downloading, elementary knowledge of air compressors, and guidance to trouble shooting and maintenance and releasing of the enterprise news will be provided by the company website to develop an exchange platform between the enterprise and agencies with clients.



Safe, Stable, Energy Saving & Environment Friendly

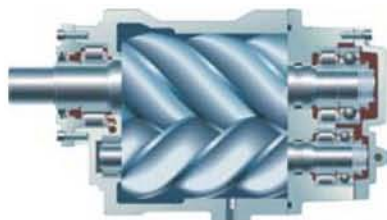
Unique and reasonable layout

The reasonable layout which has the honor to get the national patent integrates the mechanics and electrical. The machine doesn't require special foundations at site of the client, the handling and installation is very convenient. The space in the machine is divided into cold and hot cells which will not affect each other. The scientific internal air circulation ensures that the parts are fully cooled and the service life is extended. The fully closed and removable casing is designed to reduce the noise of the machine. The excellent inflammating retarding sound insulation sponge is lined in side to allow you much more flexibility in consideration of the installation of the air compressor. The machine doesn't only conform to the environmental protection requirement but it is also convenient for cleaning of the machine.

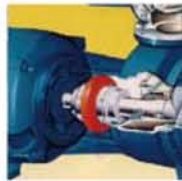
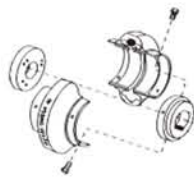


Efficient and energy saving air end

The air end is recognized by the industry for its sophisticated and unique design and precise manufacture. The optimized profile and seal line embodied the characteristic of high efficiency and durability, maximally reduce the leakage and further improve the volumetric efficiency. The large diameter rotor aspect ratio are used to ensure the high output and lower power consumption.



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Reliable direct drive

The elastic couplings and center brackets are used air compressor with power above than 55KW (including 55KW) to integrate the motor and the main machine to ensure the permanent centering of the motor and the main machine during transport, installation and operation, which reduces torsion of startup and achieves the lowest energy consumption and the least maintenance work.



Belt drive for convenient maintenance

The belt drive is used for the air compressor with power less than 45 KW (including 45 KW), which can not only make the machine change the mode rapidly but also pay the role of overload protection. The humanized automatic tension mechanism and the isolation design of moving parts and static parts can reduce the maintenance work and ensure more safety of operating environment.

Excellent quality and efficient motors

UNITED OSD has partnered with an industrial leader to develop a perfectly matched top quality motor which equips high duty SKF bearing and whose both ends have an inlet for lubricating grease. A higher protection grade for a higher efficiency to prevent powers and water get into the motor. (protection grade IP55, F-grade insulation and temperature rise less is specified as B class.)

IP table of protection grade

Protective grade	Dustproof	Moisture proof
0	without special protection	without special protection
1	For particles with the diameter above 50mm	For water drops
2	For particles with the diameter above 12mm	For water drops at 15°C
3	For particles with the diameter above 2.5mm	For water spatters at 60°C
4	For particles with the diameter above 1mm	For water spatters from all directions
5	For dusts	For spray water from all directions
6	Dust tightening	For waves or intensive spray water
7	/	For immersion in water
8	/	For submersion in water



Innovative Technology & Satisfactory To Requirement

EPC intelligent control system

The UNITED OSD air compressor is equipped with EPC intelligent control system, to guarantee full automatic and intelligent running. The discharge pressure is controlled between the upper and lower limit with the inlet valve by means of detection of the site data of discharge pressure and temperature so that the stable pressure is exported. The system will shutdown automatically when the compressed air is not required for a long time; and it can start up again when the requirement resumed. In this way, it is not only a stable pressure can be exported but also achieves the effect of energy saving. In addition, various malfunctions at site can be diagnosed promptly during operation, which to the maximum extent ensure the reliable operation of the air compressor and prolong the service life.

Local control

- Chinese (English) display, feather-touch button and perceptual intuition, rapid and convenient with menu operation.
- The delay time of star-triangle conversion, startup, loading, shutdown and overpressure can be preset and controlled during operation.
- It can display and handle various faults at site.
- It can save and inquire the type and time of occurrence of faults happened in the past.
- The internal calendar is provided that can be shown correctly for a long time and can be revised.
- It can accumulate and save for a long time the running time, loading time, off-loading time and the time of various filters used.
- Various preset parameters and accumulated time can be checked at any time during operation.
- Various parameters can be revised and the time of saving can be extended by client

Linkage control

One of air compressors can be set as the main machine and the rest as auxiliary machines or standby machines (the maximum can be up to 16 sets) to achieve the linkage control of multi air compressors so that the economic and stable air supply can be guaranteed. The startup/shutdown sequence of each air compressor can be automatically adjusted and the accumulated working hours of each air compressor can be balanced by the EPC intelligent controller.





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Remote control

The remote startup, shutdown and delivery of the signal of fault and early warning can be achieved by the central control board (DCS) through the passive dry contact.

Host computer control

More than 2 air compressors can be linkage controlled by the host computer to achieve the acquisition and display of the site signal, the coordination control and computer operation. With the setting of the host parameter, the client can control the air compressor unit in all aspects at any time to achieve the stable compressed air in the range of the set pressure.

- Obtain abundant site data and display the same
- Vivid graphical interface
- Monitoring of equipment operation status
- The important data is recorded in the data base
- The data history report forms can be automatically generated for inquiry
- Setting of operating parameters for the air compressor controller
- The trend curve of parameters of pressure, temperature and etc.
- Real time alarming and history alarming
- Operation mode as per limit of authority and the corresponding password shall be entered for important operation
- Single air compressor test
- Reminding for maintenance or replacement of easily damaged parts of the air compressor

* UNITED OSD provides customize PLC central control system.

To facilitate the human-computer interface by the IPC, LCD, DCS and configuration software to achieves the remote monitoring and control. It has the attributes of controlling many air compressors and independent development.

Advanced Idea & Consideration With Details

Energy saving air inlet control system

The latest design control system is equipped to the air compressor. The integrated design will integrate the air inlet and discharge of the air compressor to reduce the control pipeline of the air compressor to the minimum.

The check valve is installed in the air flow control system. The check valve will close automatically when the air compressor is shutdown or the supply of air is stopped suddenly to prevent the compressed air from back flowing and avoid the oil vomiting. The UNITED OSD compressor can provide three kinds of air flow adjustment modes like two point air flow control (ON/OFF), infinite air flow control (60%-100%) and delayed automatic shutdown and automatic startup by the combined control method of the inlet valve, intelligent control system and the pressure sensors. It can fully satisfy different requirement of the air application of users.



High efficient air/oil separating system

The high efficient air/oil separating system, consisted of the drum with specially designed internal structure, aggregated separating core and oil returning device, makes the oil content at the discharge compressed air less than 2PPM.

- Level One The mechanical separation is used and approximately 99% oil will be separated.
- Level Two Filter consists of specially designed multi-layer fiberglass assures a higher quality compressed air.
- Level Three The oil return system ensuring the oil contained in compressed air can be disregarded.

High efficient cooling system

Both air cooling or water cooling can be designed and manufactured as per the different requirement of the user.

The combination of the sidelong serrated fin cooler and the absorption cooling fans is adopted in the air cooling unit to improve the condition of air circulation and the effect of heat exchange is remarkable. The heat dissipation of various parts and the electrical equipment in the machine is guaranteed to make the discharged air temperature lower.

The chimney cooler with large margin is adopted in the water cooling air compressor to ensure unit operates in hazard working condition.





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Heavy Duty Air Inlet Filter

The air inlet filter UNITED OSD is equipped with high performance efficiency filter element, one that specifically made for mechanical industry. Its high quality assures the well-being of all foundations, extends the lifetime of filter and requires no maintenance.

- Effectively reduce pressure loss as compressed air through filter directly without direction changing.
- Up to 3% energy efficient than conventional air filter.
- Larger area of filter element extends its lifetime.
- High accuracy filtering: as high as 99.99% ($1\ \mu\text{m}$).

Advanced integrated modules

The combination of oil filter base and thermostat which has got the national patent makes the connecting pipeline in the machine briefer, which avoids the leakage, reduces the pressure loss of pipeline, lowers failure rate and facilitates the installation and maintenance.

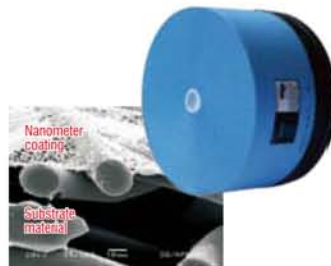
Multi-purpose moisture separator

Clever design by assemble moisture separator and after cooler together, as result of space saving and reduce leakage. Moisture separator adopted advance separator technology from Germen will effectively absorb condensate from the compressed air when the compressed air is bypass after cooler. Once the condensate of moisture separator reaches a certain level, auto drain will be enabled automatically drain away the condensate, which can prevent moisture separator to be jammed. 70% of water in air will be released and, as a result of which, improves the quality of compressed air. Condensate would be evacuated manually by turning on the manual drain valve when machine in maintenance.

Super coolant

The superiorities of super coolant are as following:

- 12, 000 hours lifetime greatly extends compressor's service cycle.
- Reduce cost for conventional coolant oil as the super coolant oil has a superior reparability.
- No hydrocarbon and eliminating leftovers from oxygenation.
- Achieve higher efficiency and longer service time for the related mechanical parts.



Technical parameters

Model	Nominal Power (kW)	Work pressure/ maximum work pressure (bar)	Air flow (m ³ /min)	Outlet dimension	Weight (kg)	Dimension (LXWXH mm)
UD5A-7C	5.5	7/7.5	0.92	G3/4	250	820X670X900
UD5A-8C		8/8.5	0.85			
UD5A-10C		10/10.5	0.69			
UD8A-7C	7.5	7/7.5	1.25	G3/4	280	820X670X900
UD8A-8C		8/8.5	1.20			
UD8A-10C		10/10.5	1.05			
UD8A-12.5C		12/12.5	0.85			
UD11A-7C	11	7/7.5	2.05	G1-1/2	520	1300X1000X1350
UD11A-8C		8/8.5	1.88			
UD11A-10C		10/10.5	1.65			
UD11A-12.5C		12/12.5	1.28			
UD15A-7C	15	7/7.5	2.90	G1-1/2	550	1300X1000X1350
UD15A-8C		8/8.5	2.70			
UD15A-10C		10/10.5	2.30			
UD15A-12.5C		12/12.5	1.90			
UD18A-7C	18.5	7/7.5	3.20	G1-1/2	670	1300X1000X1350
UD18A-8C		8/8.5	2.90			
UD18A-10C		10/10.5	2.70			
UD18A-12.5C		12/12.5	2.20			
UD22A-7C	22	7/7.5	3.70	G1-1/2	700	1300X1000X1350
UD22A-8C		8/8.5	3.50			
UD22A-10C		10/10.5	3.20			
UD22A-12.5C		12/12.5	2.70			
UD30A(W)-7C	30	7/7.5	5.60	G1-1/2	930	1350X1150X1450 (A)
UD30A(W)-8C		8/8.5	5.40			
UD30A(W)-10C		10/10.5	4.50			1350X1150X1450 (W)
UD30A(W)-12.5C		12/12.5	3.70			
UD37A(W)-7C	37	7/7.5	6.80	G1-1/2	980	1350X1150X1450 (A)
UD37A(W)-8C		8/8.5	6.50			
UD37A(W)-10C		10/10.5	5.80			1350X1150X1450 (W)
UD37A(W)-12.5C		12/12.5	4.60			
UD45A(W)-7C	45	7/7.5	8.10	G1-1/2	1030	1350X1150X1450 (A)
UD45A(W)-8C		8/8.5	7.80			
UD45A(W)-10C		10/10.5	7.00			1350X1150X1450 (W)
UD45A(W)-12.5C		12/12.5	5.80			
UD55A(W)-7C	55	7/7.5	10.50	DN50	1780	2100X1350X1550 (A)
UD55A(W)-8C		8/8.5	9.80			
UD55A(W)-10C		10/10.5	8.50			2100X1350X1550 (W)
UD55A(W)-12.5C		12/12.5	7.30			
UD75A(W)-7C	75	7/7.5	13.50	DN50	1870	2100X1350X1550 (A)
UD75A(W)-8C		8/8.5	12.50			
UD75A(W)-10C		10/10.5	10.80			2100X1350X1550 (W)
UD75A(W)-12.5C		12/12.5	9.00			
UD90A(W)-7C	90	7/7.5	16.2	DN50	2140	2100X1350X1550 (A)
UD90A(W)-8C		8/8.5	15.2			
UD90A(W)-10C		10/10.5	13.6			2100X1350X1550 (W)
UD90A(W)-12.5C		12/12.5	10.5			



Model	Nominal Power (kW)	Work pressure/ maximum work pressure (bar)	Air flow (m ³ /min)	Outlet dimension	Weight (kg)	Dimension (LXWXH mm)
UD110A(W)-7	110	7/7.5	20.8	DN80	3300	3050X1850X2120 (A)
UD110A(W)-8		8/8.5	20.0			2850X1850X2120 (W)
UD110A(W)-10		10/10.5	17.5			
UD110A(W)-12.5		12/12.5	14.2			
UD132A(W)-7	132	7/7.5	24.0	DN80	3400	3050X1850X2120 (A)
UD132A(W)-8		8/8.5	23.0			2850X1850X2120 (W)
UD132A(W)-10		10/10.5	20.6			
UD132A(W)-12.5		12/12.5	17.0			
UD160A(W)-7	160	7/7.5	28.5	DN80	3750	3050X1850X2120 (A)
UD160A(W)-8		8/8.5	27.0			2850X1850X2120 (W)
UD160A(W)-10		10/10.5	25.0			
UD160A(W)-12.5		12/12.5	19.7			
UD180A(W)-7	180	7/7.5	31.0	DN80	3790	3050X1850X2120 (A)
UD180A(W)-8		8/8.5	30.0			2850X1850X2120 (W)
UD180A(W)-10		10/10.5	27.0			
UD180A(W)-12.5		12/12.5	22.5			
UD200A(W)-7	200	7/7.5	35.0	DN100	5100	3400X1850X2120 (A)
UD200A(W)-8		8/8.5	33.5			3400X2120X2400 (W)
UD200A(W)-10		10/10.5	32.0			
UD200A(W)-12.5		12/12.5	26.5			
UD250A(W)-7	250	7/7.5	45.3	DN100	6590	3700X2120X2200 (A)
UD250A(W)-8		8/8.5	43.0			3400X2120X2200 (W)
UD250A(W)-10		10/10.5	38.0			
UD250A(W)-12.5		12/12.5	32.5			
UD280A(W)-8	280	8/8.5	50.2	DN100	6790	3700X2120X2200 (A)
UD280A(W)-10		10/10.5	42.0			3400X2120X2200 (W)
UD280A(W)-12.5		12/12.5	38.0			
UD315A(W)-8	315	8/8.5	56.0	DN125	7500	3700X2120X2200 (A)
UD315A(W)-10		10/10.5	50.0			3400X2120X2200 (W)
UD315A(W)-12.5		12/12.5	42.0			
UD355A(W)-8	355	8/8.5	66.0	DN125	8400	4650X2150X2120
UD355A(W)-10		10/10.5	55.0			
UD355A(W)-12.5		12/12.5	46.0			
UD400A(W)-8	400	8/8.5	74.0	DN150	8400	4650X2150X2120
UD400A(W)-10		10/10.5	64.0			
UD400A(W)-12.5		12/12.5	54.0			
UD450A(W)-8	450	8/8.5	82.0	DN150	9000	4650X2150X2120
UD450A(W)-10		10/10.5	72.0			
UD450A(W)-12.5		12/12.5	61.0			
UD500W-8	500	8/8.5	90.0	DN200	9500	4650X2150X2120
UD500W-10		10/10.5	80.0			
UD500W-12.5		12/12.5	68.0			
UD560W-8	560	8/8.5	100.0	DN200	10000	4650X2150X2120
UD560W-10		10/10.5	86.0			
UD630W-8	630	8/8.5	120.0	DN200	10000	4650X2150X2120
UD630W-10		10/10.5	100.0			

The air flow (FAD) is tested as per the requirement in ISO1217 standard (GB/T3853) under the load condition of the unit.

The UD5-UD22 air compressor is an air cooling type (A), the UD30-UD450 air compressor is an option of air cooling type (A) or water cooling type (W) and the UD500-UD630 air compressor is a water cooling type. The soft startup or high voltage motors can be selected and for relevant technical data, please consult to UD sales engineer.

UNITED OSD, To Be The First Brand Of Compressor In China

We have a professional team behind our business representatives aiming at to maximize your profitability by providing perfect matched air solution to your customized requirements. Your profitability is achieved through our determination to provide you with more energy efficient, flexible and reliable air compressor. In addition to air compressors, we can also provide you air treatment, such as air receiver, air dryers and filters.

UNITED OSD has always regarded the user as a long-term partner and your satisfaction is our greatest joy and honor!



Double certifications of both ISO9001 quality control system and ISO14001 environment control system.

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