

To Provide Compressed Air System is Our Core Business

For the lowest purchasing cost for customers, Sullair provides an entire air system designed to lower operating cost, increase reliability and maximize return on investment.

Sullair Permanent Magnet VSD Air Compressors PM22-PM37 ■ 22-37KW



Sullair offers compressed air system to help users reduce their operating costs and improve productivity by analyzing, managing and controlling all compressed air devices. To satisfy your special requirement on the compressed air system, please contact the local Sullair distributors to seek more help. To acquire local Sullair distributors' contact information, see the below website or make a phone call.



Shenzhen Sullair Asia Ltd.
Zuo Pao Tai Road, Chiwan Shenzhen 518068, China Tel: 86-755-26851686 Fax: 86-755-26853475

Suzhou Sullair Air Equipment Co., Ltd.
No.266 Changyang Street, Suzhou Industrial Park, Suzhou, Jiangsu, China Tel: 86-512-87162388 Fax: 86-512-87162389

Sullair Asia Pte Ltd.
30 Pioneer Crescent, #10-15 West Park BizCentral, Singapore 628560 Tel: (65)63057436/63057445 Fax: (65)63057414

Sullair Taiwan Ltd.
3F-1, No.248, Chung-Shan Road Lin-kou Hsiang, Taipei Hsien Tel: 886-2-26013500 Fax: 886-2-26013032

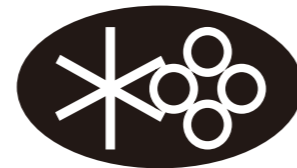
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The Only Air Compressor Manufacturer To Concentrate Exclusively on Screw Technology

Since 1965, Sullair Corporation has been leading the innovation in the fields of screw compression and vacuum technology. With over 50-year experience, Sullair has been making a new round of innovation in this field. Utilizing the most advanced technologies, equipment and manufacturing techniques, Sullair provides customers the best air compressor and vacuum equipment in order to meet the customers' strictest requirements. Sullair has taken the industrial lead in the field by virtue of its first-class screw rotor design.

Sullair products are universally known around the world for its practical design, outstanding craftsmanship and superior quality. Sullair professionals provide you PM series 22-37kW air compressor with simple structure, easy operation and great performance by optimal design provided that guarantee the amazing reliability, stability and related performance specifications of Sullair products. In fact, its design has made the new standard for this industry in every aspect.



This company has been certified by ISO9001: international quality management system.

Together with Sullair, You are Buying Perfect Customer Service

At Sullair, "Customer Satisfaction" is a cornerstone of the corporate philosophy. Our services include:

- Maintenance and service
- Customer training
- Energy efficient products
- Provision of Sullair parts



Energy Saving Certification

Energy efficiency indexes of nearly 50 series Sullair air compressors meet the requirements of national evaluating values of energy conservation. Some models meet the Level 1 energy efficiency standards, which are eligible to apply for national energy conservation subsidies.



Together with Sullair, You will Get More Than Air Compressors

Together with Sullair, what you will purchase is the world's leading screw technology and global services ability. Sullair provides the manufacturing industries, textile, food, construction, mining and energy industries with high-quality products and services.

The international service network of Sullair includes subsidiaries in different regions, designated agents and distributors who offer their best services to customers of Sullair around the world every day.

PM 22-37 Series Air Compressors

High-efficient Cooling System

- Extra-large cooler with big design margin, heat radiating area of which is one third larger than normal cooler
- High cooling efficiency, lower the running cost

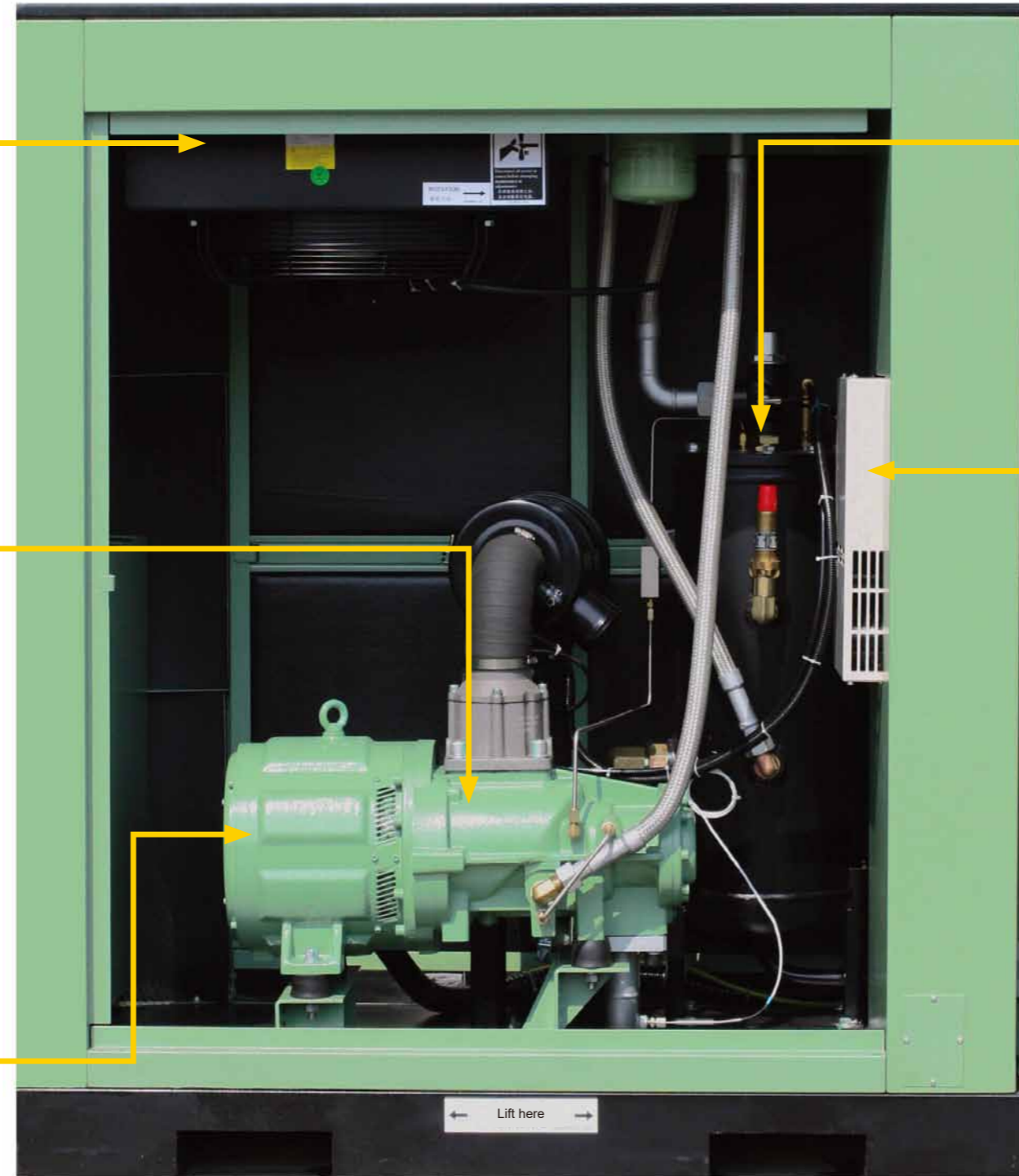


Compressor Air End

- Newly designed compressor air end, totally appropriate for permanent magnet VSD solution
- Embedded integral-shaft direct-connection structure with no transmission loss and high efficiency
- Efficient permanent magnet motor and male screw rotor adopting embedded integral-shaft direct-connection structure, realizing 100% transmission efficiency
- No gear box, no belt and no transmission efficiency loss
- Equipped with high-efficient permanent magnet motor, achieving excellent energy efficiency performance; maintain very high motor efficiency specially in low frequency and low speed
- Bearingless motor: motor rotor and male rotor are directly coaxial and the motor has no bearing, which eliminates trouble spots of the motor

High-efficiency Permanent Magnet Synchronous Motor

- Permanent magnet motor goes without electro-magnet and its power factor closely reaches 100% with no extra loss
- Efficiency of IE4 ultra high-performance motor being 25% higher or more than asynchronous motor when operating in partial load with lower rotational speed
- Adoption of special permanent magnet material for the motor, allowing wider speed adjustable range and higher efficiency



Note: the above picture is only used for reference, and the machine should be subject to the real product.

Fluid/Air Separator Element

- High efficient and large fluid/air separate system with special design for multi-stage separate structure making excellent separation
- Fluid/Air separator element of Sullair patent, oil content in exhaust is less than 2ppm

Special Inverter for Permanent Magnet

- Specifically developed VSD control technology in the light of permanent magnet motor
- Module design, easy for maintenance and extension
- Innovative cooling method and circuit board with coating, remarkably improving stability and service life of inverter
- MODBUS supportable, providing strong communicating function

Free of Coolant Replacement for Good (optional)

- Sullair-patented 24KT coolant is available and free of replacement for good, which adapts to any poor working conditions and will not be oxidized, emulsified or deteriorated

PM 22-37 Series Air Compressors

Bearings with High Quality (Compressor Air End)

- With design life of 100,000 hours and high reliability
- The tapered roller bearing in the air outlet is adopted to ensure the performance of the compressor air end
- The design of bearing fluid reservoirs ensures the lubrication of the compressor air end under special work condition



Sullair Special Fluid

- High oxidative stability with longer service life
- Better adaptive to the system, and lower operation costs
- Low solidification point ensuring good adaptability in low temperature



Fluid Filter

- Filter material with aerial quality providing better filtration
- Over twice dirt holding capacity than normal filter material
- Easy to deal with the disused filter and lower cost for it



Air/Water Separator

- Centrifugal separation design with high efficiency and lower pressure loss
- Aluminum cover with anticorrosion, being durable in use
- Automatic drain valve with little leakage, high efficiency and stable performance



Note: PM22-37 standard configuration.

Micro-computer Controller

- Equipped with functions of temperature, pressure and other parameters real-time displaying and warning
- Query of failure record, being convenient for maintenance and analysis
- LED screen, simple control and convenient for use



Electric Cabinet

- Adopting copper wiring for wire connection, being convenient for operation and maintenance
- Adopting electrical parts of silver contactor, service life can reach more than 3000000 times
- Built-in phase sequence protection and under-voltage protection, ensuring the normal operation of the customers' machine



Control System

- Modular design, optimized control modes and high reliability
- Simplified system structure being convenient for installment and maintenance
- Improving efficiency and reducing the energy consumption compared with traditional control modes



Focus on Environment

- Totally-enclosed protection panel avoiding the spill of the fluid when maintain the air compressor
- Low fluid consumption amount, reducing the use costs and processing expense of the customers
- Rubber shock absorber used in parts including air end, motor, etc. reducing the noise effectively



PM VSD Series Air Compressors



Inverter

- Integration into the whole unit, achieving an integral design and optimal performance
- Module design, making application and maintenance extremely convenient and friendly
- Innovative cooling method and circuit board with coating, remarkably improving stability and service life of inverter
- Equipped with strong communicating function, supporting RS485, etc. quipped with USB port, making local debugging and fault diagnosis easier
- Equipped with MMC/SD card slot, making parameter cloning more time-saving



Sullair High-efficiency Air Filter

- Adoption of fully enclosed structure, effectively preventing dust from entering
- Spare flow design; original filtration efficiency reaches 99.5% under rated flow; filtration precision reaches 2ppm; high-precision air filter
- Inlet pressure loss $\leq 2500\text{pa}$, greatly reducing air loss and improving unit efficiency



Drive Motor

- High-efficiency permanent magnet synchronous motor is selected into the 6th and 7th national product catalogues for High-efficiency Motor Promotion of Energy-Efficient and People-benefit Project
- Special enclosed structure design, totally preventing leakage of fluid and free from leakage trouble
- Motor stator adopting corona-resistant enameled wire dedicated to inverter with excellent performance and longer service life
- Special motor casing design and independent air cooling of the motor, enabling no dependence on cooling system of the compressor and making operation more stable



Design Advantages of Sullair Permanent Magnet VSD Air Compressor

- Reasonably matching compressor air end based on work conditions of loading, achieving optimal performance
- Optimize inlet adjustment function and simplify air piping control
- A set of PID parameters, ensuring optimal operating efficiency of air compressor
- Install input reactor and employ shielded wire to connect with the motor so as to avoid interference

Sullair PM Series VSD Air Compressor with High Efficiency, Stability and Lower Energy Consumption

Sullair PM permanent magnet VSD unit adopts brand new design. Perfect matching of high-efficiency permanent magnet motor and high-efficiency compressor air end substantially reduces use cost of customers and furnishes stable and reliable compressed air through advanced speed regulation and VSD technology of inverter;

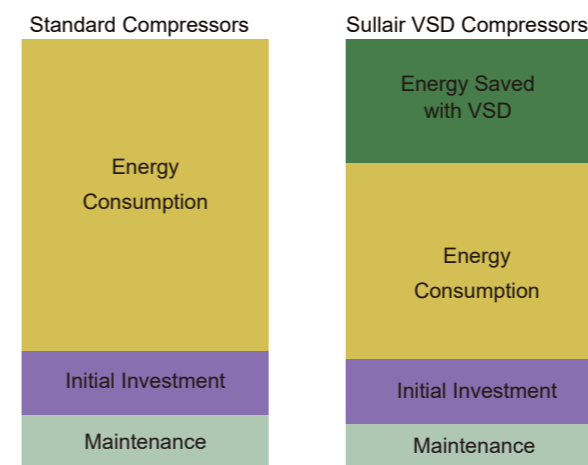
As domestic manufacturers are affected by orders at present, operating loading of air compressor varies greatly. According to authoritative departments, average loading rate of air compressor is between 60% and 70%. Power frequency air compressor has the following disadvantages when operating under such condition:

- Large power waste during unloading period
- Pressure fluctuates greatly
- Loading and unloading occur frequently and wear of mechanical parts is large

By adopting permanent magnet VSD models, run speed of air compressor can be regulated based on air consumption of ends so that power consumption of the air compressor is linearly proportional to the generated air consumption to realize the goal of stabilizing pressure and saving energy:

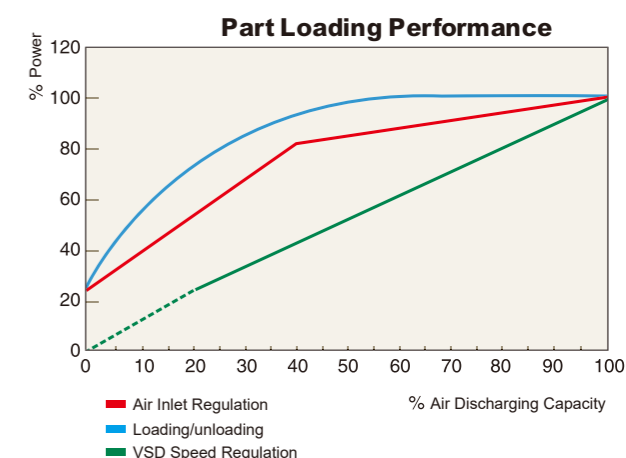
- Eliminate the power wastes of idle running
- Stabilize air pressure of ends
- Steady and smooth start without shock

Your compressed air system can reduce your cost of air consumption: 35% energy saving within 5 years



Comparison of Energy Conservation:

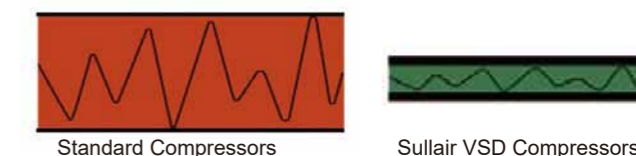
Taking 37kW as an example, a power frequency machine consumes 254560kWh under the work condition of 60% loading and operation of 8000 hours per annum, while PM machine consumes 177600kWh under the same work condition with the energy conservation of 76960kWh.



VSD Soft Start, Unlimited Starts and Stops

- No need start-delta or other start methods, and no need to control the number of cold and hot starts
- Reduce the electrical characteristics requirement and save the cost
- Avoid impulse current at direct start and lengthen service life of the equipment

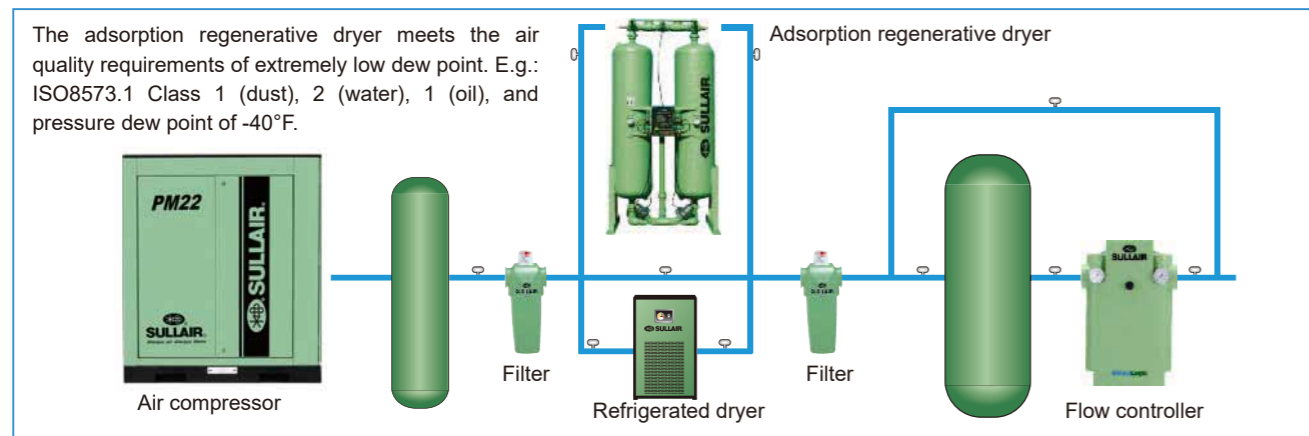
Sullair VSD Air Compressors Provide Customers Stable System Pressure, and Improve the Stability in Production Process and Reduce the Fraction Defective



Sullair Compressed Air System

Sullair compressed air system includes: air compressor, refrigerated dryer, adsorption dryer, compressed air filter and flow controller. According to different quality requirements of compressed air, Sullair can provide solutions of different configurations.

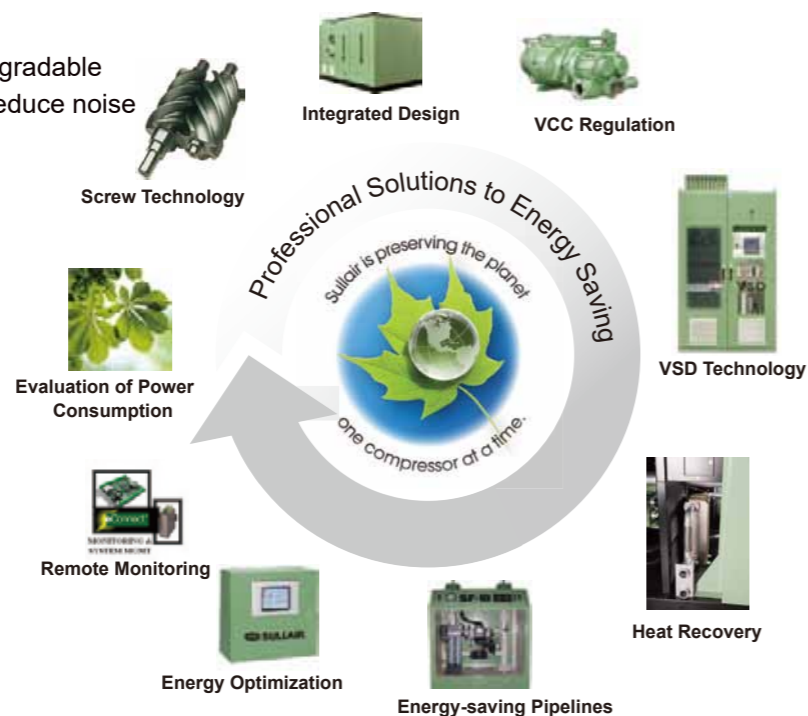
Sullair guarantees that the compressed air can meet the most stringent air quality standard ISO8573.1:2010 and satisfy the compressed air application requirements at customers' critical locations.



Focus on Environment

Sullair not only committes to provide customers with the highest efficient air compressors but also focuses on environmental protection. Sullair PM series air compressors have the following features of environmental protection:

- Fully-sealed protection panel
- Small amount of fluid and biodegradable
- Use rubber shock absorber to reduce noise



Technical Specifications

PM 22-37 Permanent Magnet Air Compressor

Model	Motor		Max. Air Discharge Pressure			Weight kg	Outlet Dimension
			7.6bar	8.6bar	10.6bar		
	HP	kW	Air Discharge Capacity m ³ /min				
PM22	30	22	3.91	3.63	3.23	680	Rc1
PM30	40	30	5.44	5.04	4.40	980	Rc1-1/2
PM37	50	37	6.70	6.50	5.43	980	Rc1-1/2

Equipment Dimensions

Model	Length (mm)	Width (mm)	Height (mm)
PM22	1340	740	1315
PM30	1600	860	1565
PM37	1600	860	1565

Notes:

1. PM Permanent Magnet VSD Series Air Compressors are air-cooled models.
 2. Air discharge capacity is measured under the rated air discharge pressure according to international GB3853 test (equal to ISO1217 Appendix C).
- 24 KT fluid, SULLUBE can be chosen for PM22-37 series air compressors, please consult the Market Department of Sullair for details.

