

GPM2 SERIES

HIGH SPEED DRIVEN OIL FREE SCREW COMPRESSOR

INSPIRE INFINITE POWER

100% OIL-FREE

TÜV CLASS 0 CERTIFICATION

ENERGY SAVING AND ECO FRIENDLY



SHANGHAI SCREW COMPRESSOR CO., LTD.

A: No.1555.Tingfeng Rd.North Jinshan Industrial Zone,Shanghai.P.R.China
T:+86-21-5738 3073
F:+86-21-5738 2222
E-mail:info@scrcompressor.com
Web:www.scrcompressor.com

SCR2024.12



SHANGHAI SCREW COMPRESSOR CO., LTD.

ABOUT SCR



SHANGHAI SCREW COMPRESSOR CO.,LTD is a high tech Japanese joint venture with independent intellectual property, founded in 2000. SCR together with Anest Iwata focus on air compressor research and development, covering all aspects from manufacturing through to sales, service and technical support. SCR supply a complete range of products such as high efficiency permanent magnet variable speed air compressors, oil free screw compressors, oil free scroll compressors, bearing free and magnetic centrifugal blowers. The global sales and service network provide our customers with high-quality, energy efficient and environmentally friendly compressed air solutions.

SCR's statement of "Inspire Infinite Power" signifies the close relationship with their global partners, and suppliers. SCR is committed to building an industrial world with continuous improvement for both its customers, the environment and its employees.

 **100000m²**
Square meters factory

 **83**
Country exported

 **50000**
Global customers

 **158**
National patents

 **35**
Professional certifications

 **500**
Global sales and service agents

 **8%**
Annual sales re-invested into R&D

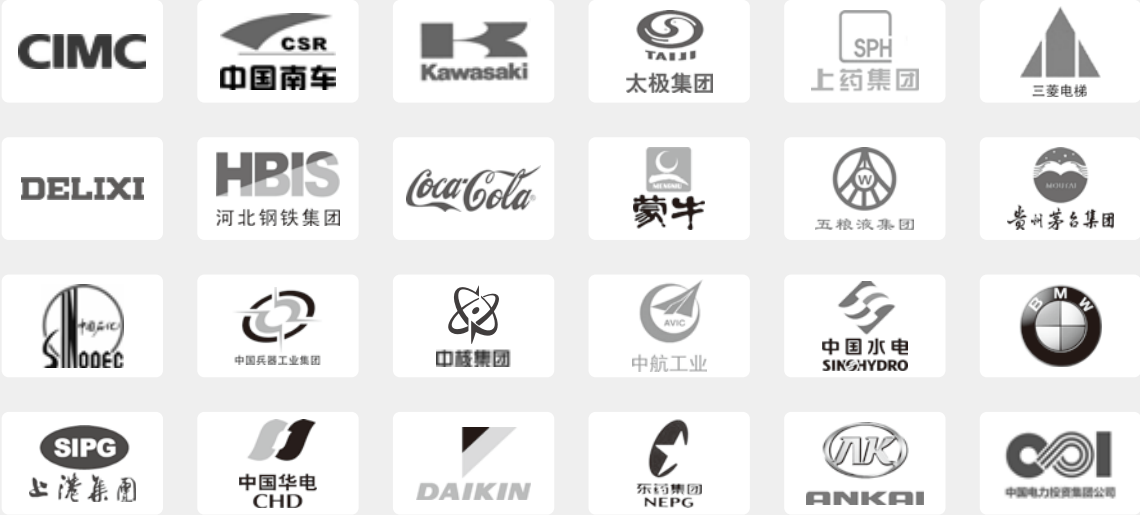
 **23**
Industry standards

 **140000**
Production volume from 2000

WORLDWIDE DISTRIBUTION CHANNELS



LEGEND:
 Headquarters
 Major global sales outlets



GPM2-HIGH SPEED DIRECT DRIVE TWIN-SCREW OIL-FREE AIR COMPRESSOR

- ✓ 100% oil-free
- ✓ New direct drive power system
- ✓ ntelligent control system

New high-speed direct drive system

Energy efficiency improved by 3.5%

Direct drive reduces gear transmission and coupling transmission loss, increasing energy efficiency by about 1.5%

The body is equipped with dual permanent magnet motors, which increase motor efficiency by 1%-2%

The first and second stage speeds are adjustable, effectively solving the problem of medium pressure rise and increasing energy efficiency by 1%



SCR GPM2 series has obtained the German TÜV CLASS 0 oil-free certification, providing enterprises with 100% oil-free, Clean and high-quality compressed air. The machine adopts a brand new high-speed direct drive system with ultra-high energy efficiency, which greatly reduces the cost of compressed air usage for enterprises.

SCR PRODUCTS HAVE OBTAINED GLOBAL CERTIFICATION AND INDUSTRY RECOGNITION



CLASS 0 oil-free certification



UL certification



EU CE certification



EU EMC certification



ISO Quality Certification

TECHNICAL FEATURES

► DRY OIL-FREE TECHNOLOGY

Since the introduction of oil-free screw air compressors, over 100000 pairs of oil-free rotors have been produced and applied in various industries, especially in pharmaceuticals, food, precision electronics, bio-medicine, and other fields that require extremely high compressed air quality.

► ULTRACOAT™ SUPER COATING

Super coating has super strong surface adhesion and the ability to resist environmental temperature changes, providing long-term protection for rotors and host housings. Special technical treatment ensures a strong bond between the coating and the rotor surface, making it less prone to detachment; Super coating brings higher reliability, excellent compressed air quality, and longer rotor life to air compressors, greatly increasing fault free operation time and reducing system energy consumption.

► INTELLIGENT LUBRICATION SYSTEM

Configure a turbo pump with self-priming function to supply oil to the system separately, eliminating the problem of poor oil supply during low-frequency operation of the air compressor; Add a pipeline system to ensure a pressure of -400Pa inside the oil tank, and solve the problem of oil leakage through the ventilation port and shaft seal of oil-free machines.

► DOUBLE SEALING

The stainless steel air seal and uniquely designed labyrinth seal provide dual protection measures to ensure the acquisition of pure, oil-free, high-quality compressed air.

► ZERO AIR CONSUMPTION DRAINAGE SYSTEM

The drainage valve has a large aperture and is equipped with a filter screen, which is unobstructed; Efficient and energy-saving, with no air loss; Optional heating rod device for cold regions.

► HIGH SPEED DIRECT DRIVE OIL-FREE AIREND

Direct drive reduces gear transmission and coupling transmission, increasing energy efficiency by about 1.5%; It is equipped with dual permanent magnet motors, which increase motor efficiency by 1% -2%; The first and second stage speeds are adjustable, effectively solving the problem of medium pressure rise and increasing energy efficiency by 1%; Gearbox with reduced gear speed rate, reducing volume by 30%; The machine head, motor, gearbox, pressure reducing valve, and oil filter are integrated into one, with built-in pipelines for easy installation.

► ULTIMATE NOISE CONTROL

The shock-absorbing fully enclosed base is lined with sound-absorbing materials, and the unit meets European environmental standards; Design an air inlet soundproof speaker to effectively prevent the transmission of high-frequency noise; Double centrifugal fans improve cooling efficiency and reduce noise.

► HIGH PRECISION HEAVY-DUTY AIR FILTER DESIGN

The intake system adopts high-precision heavy-duty air filter with large ash dissolution capacity and dry filter element, with a filtration efficiency of 99.9% and an accuracy of 3 microns. Easy maintenance, stable operation, and effective extension of the service life of various components of the unit.

► SIEMENS CORE CONTROL COMPONENTS

Reliable Siemens core electrical control components ensure long-term stable operation of the unit, adopting comprehensive safety protection from pressure, temperature, current, mechanical transmission, etc., to ensure mechanical and personal safety.

► TEMPERATURE ZONING DESIGN

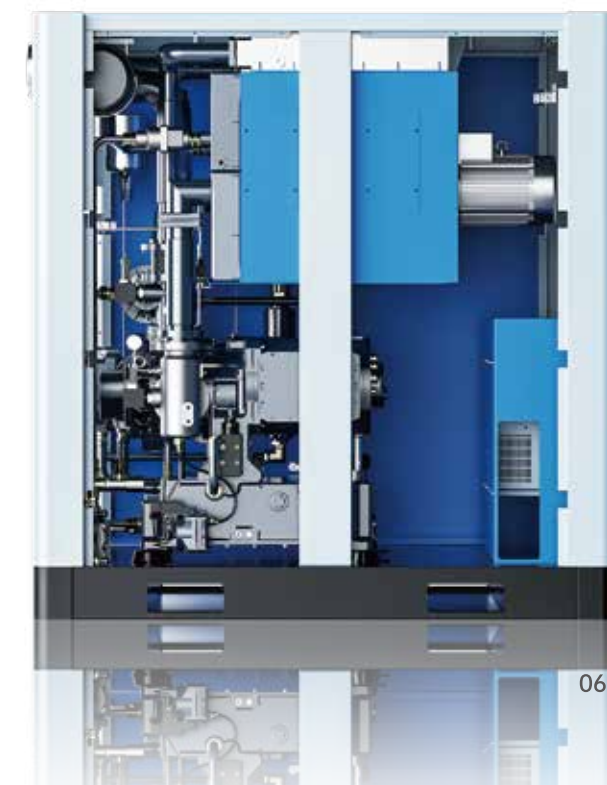
The SCR oil-free machine is designed with three independent working areas for intake, compression, and exhaust, ensuring good control of the compressor air temperature at each stage. Ensure the stability and reliability of the dry oil-free machine during operation.

► NEW INTAKE CONTROL SYSTEM

The air flow characteristics are superior to lubricating oil, making the opening and closing actions of the new intake valve more sensitive; The opening and closing linkage between the relief valve and the intake valve is simple in structure, precise in control, and stable in operation; The membrane has a long lifespan (1 million cycles) and low maintenance costs.

► COMPACT STRUCTURE

The product structure is compact, has a small total volume and occupies small area.



EFFICIENT AND ENERGY-SAVING TECHNOLOGY

IE4 Energy Efficiency Permanent Magnet Motor

- ✓ Ensure low-temperature operation of the motor within the full frequency range
- ✓ High starting torque
- ✓ IP65 protection level, fully enclosed structure with anti wave, anti strong water spray, dust tightness level
- ✓ Oil cooled permanent magnet motor
- ✓ Using 180°C high-temperature resistant permanent magnet materials to ensure non demagnetization
- ✓ Bearing less and maintenance free design
- ✓ F-class insulation level

93.3%~94.5%

UP1.2%



Inverter control

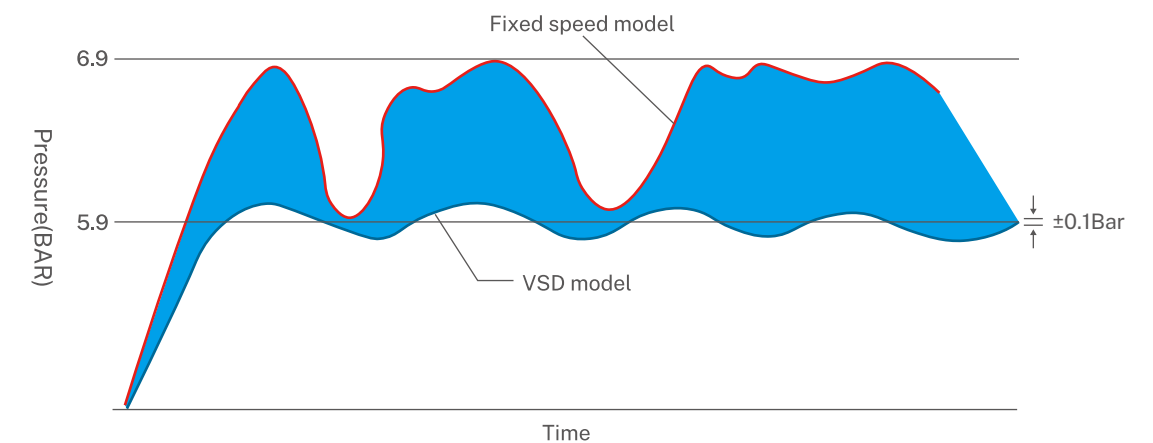
SCR EPM2 compressors have a wide operating speed range leading to stable constant pressure control further reducing power consumption. SCR's exclusive inverter and Energy Saving Logic control can get optimized energy savings, regardless of the load condition. They can react to pressure changes quickly maintaining pressure fluctuation to ± 0.01 MPa.

Dynamic motor
speed controlOptimized
capacity control
+
Constant
pressure controlComplete
energy control

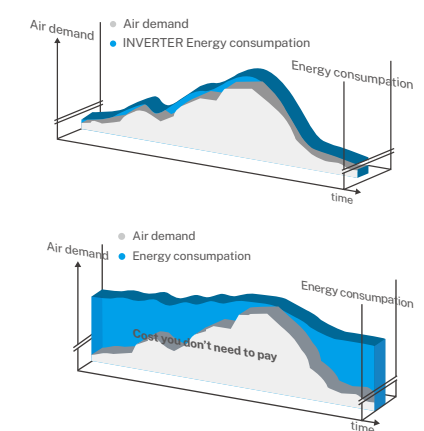
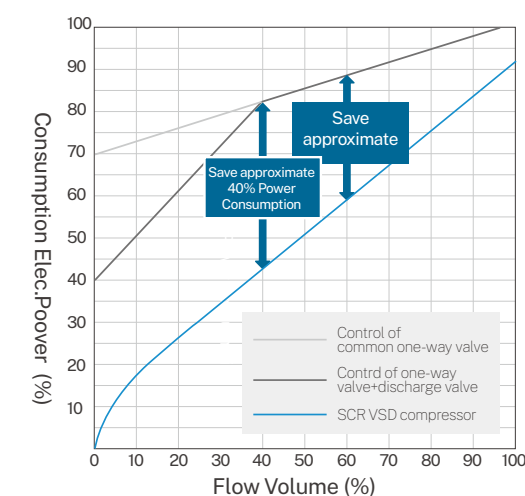
Constant pressure output

Significant energy-savings can be achieved by constant pressure control avoiding pressure fluctuations controlled to within ± 0.01 MPa.

Energy-saving model



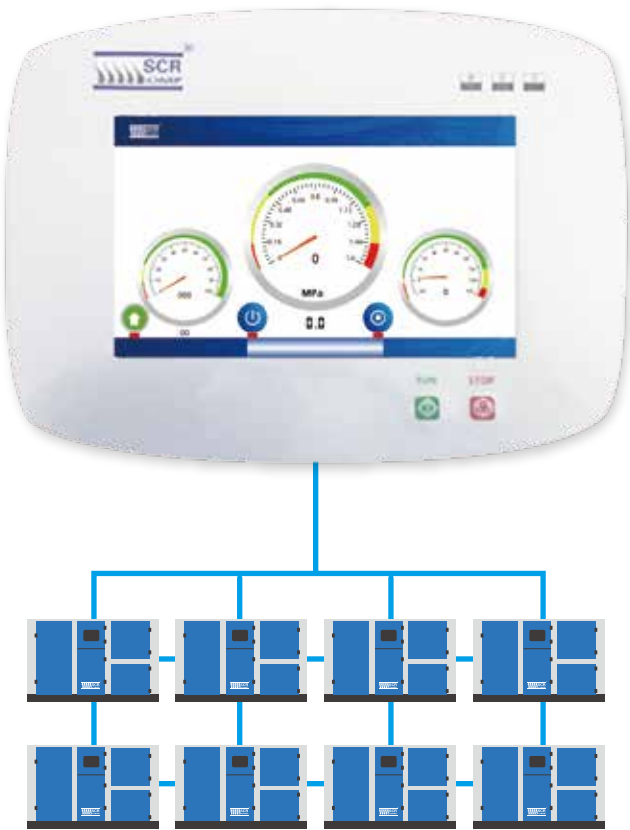
Only pay for the air you use



SCR's GPM2 series of compressors adjust compressor's rotating speed depending on the demand, which can change from moment to moment. Thus, it can provide exact volume and pressure what customer needs and achieve maximum energy saving potential. Maximizing energy-saving under any load operation through wide-range inverter control. Wide-range control and Emergency stop function.

INTELLIGENT CONTROL SYSTEM

Exclusive invention patent for air compressors by SCR



New intelligent controller

- 7-inch high-definition color LCD touch screen display
- Real time monitoring of the operating status of the air compressor
- System flowchart display, clear and intuitive
- Display the running time, load time, and unloading time of the unit
- RS485 interface, supporting multiple communication protocols
- Multilingual usage environment
- Friendly human-machine interface design

High reliable Air compressor

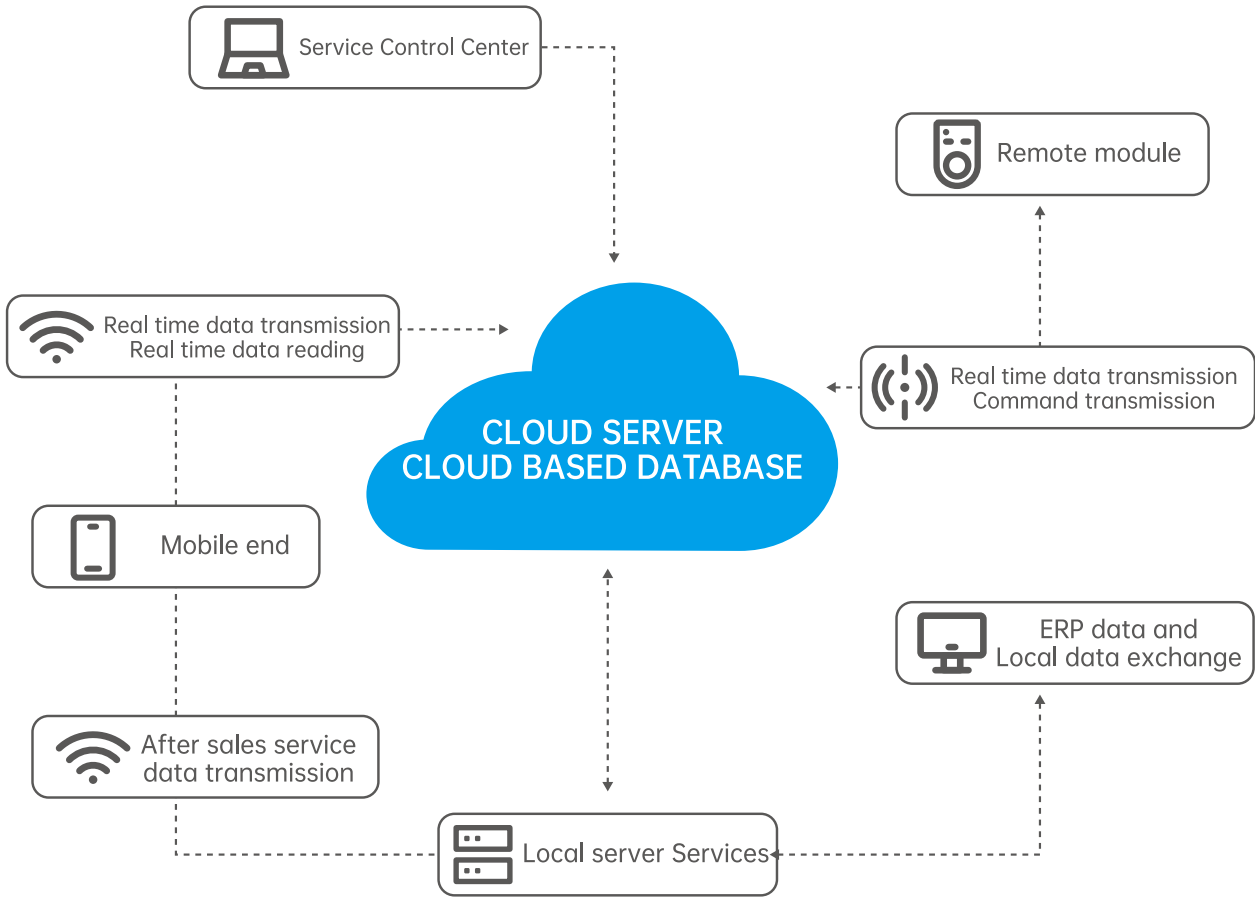
- Scientific energy-saving control logic
- It has protection functions such as phase loss, overload, imbalance, and high voltage
- Preventive alarm reminder
- Support remote monitoring
- Support periodic start stop settings for air compressors
- Real time data tracking, historical data recording
- Data analysis and reporting functions

Multiple Air compressor joint control

- It can achieve joint control of up to 16 air compressors without the need for a specific central control cabinet

Model	KW	HP	Capacity(m³/min)	Pressure (BAR)	Dimension(mm)	Weight (KG)	Size
SCR50GPM2-7	37	50	6	7	1680*1435*1730	2500	DN50
SCR50GPM2-8			5.5	8			
SCR60GPM2-7	45	60	7	7	1680*1435*1730	2500	DN50
SCR60GPM2-8			6.5	8			

CLOUD BASED INTELLIGENT CONTROL



By using a mobile app to achieve remote visual functionality, you can monitor the air compressor system in real-time even from thousands of miles away.

Potential fault warning function, the intelligent system will send you potential fault information through the mobile APP, allowing your air compressor system to shift from fault repair to preventive maintenance, thereby greatly ensuring the continuous and stable gas supply of the production system.

Powerful historical data storage function, comprehensive storage of operation reports, analysis and control of various important data of the air compressor system, comprehensive grasp of the operation status of the air compressor system, and safeguard your air compressor system.

The intelligent system detects subtle changes in gas usage and keeps the air compressor in a better operating state, achieving an unimaginable energy-saving experience.