




## DM/HL(V)-G/Z Series Low Pressure Screw Air Compressor

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Professional Air Compressor Solution Provider



Dream (Shanghai) Compressor Co., Ltd.  
No. 30 Caoli Road, Jinshan district,  
Shanghai, China

Specifications are subject to change without notice due to improvement in performance. Anything needed please contact us.



Stability | Energy Saving | Efficiency | Silence

Energy Saving Enhances Value, Ingenuity Creates the Future!

# Dream Compressor

Create the first brand of energy- saving silent air compressor



*Stability  
Engery Saving*



## About US

For more than a decade, Dream ( Shanghai) Compressor Co., Ltd.has been striving to become one of the leading manufacturers of compressed air solutions in China.

The dream is located in Xingta industrial zone, Shanghai Jinshan district with 25,000 square meter factory coverage, is specialized in designing, manufacturing and sales of air compressors and air treat-ment systems with an annual capacity of 10, 000 units. Through years of efforts, its products have won wide recognition and acclaim from the domestic and oversea markets for high performance and reliability, durability and customer care.

The company fully complies with international standards in its production and management and has acquired ( Quality Assurance) certificates of ISO9001, CE Certificate for European Market, UL & ASME

certificate for United States market and Class O certificate from TUV for our oil-free screw compressors.as well as a variety of other certificates in terms of environmental protection, safety, and electrical engineering.

- Our product lines covering the following areas:
- Oil-injected rotary screw compressors (Fixed speed and variable speed; high, normal and low pres-sure)
- Portable screw air compressors (Diesel-powered and electric motor powered)
- Oil-free air compressors ( dry type, water-lubricated type)
- High-pressure piston air compressors (Oil-injected and oil-free)
- Air treatment equipment (Air dryers, air filters and air storage tank)

## Certificates



Dream Compressor has always been a leader in the field of compressor technology, and its products include fixed screw air compressors, mobile screw compressors, piston air compressors, air dryers, precision filters, etc., which are widely used in various industries , Dream oil-free full range of products have gained the German Rhine class 0 certification. Dream company has become the premier supplier of screw compressors and piston machines with its rich experience and continuous innovation technology. After efforts, Dream has been successfully accepted by the mainland market with a good reputation.



Covering 17 product series, 500+ products for customers to select, one-stop air compressor solution provider for various industries.



# DML(V)-G Series Low Pressure (Single Stage) Permanent Magnetic Variable Speed Screw Air Compressor

## 01 Stable and efficient dedicated low-pressure air end

1. The air end specially developed for low pressure conditions optimizes the screw profile and internal pressure to improve the efficiency of the air end ;
2. Adopt the design idea of "large rotor, large bearing, low speed" to reduce noise and vibration, and increase the life and stability of the air end ;
3. The tooth surface is processed by a rotor grinder to create a high-precision rotor, which is the first guarantee for the high efficiency and stability of the air end ;
4. Compared with the atmospheric pressure machine with the same air volume, it can save energy by more than 50%, and the industry application is more energy-efficient. Protect the environment and reduce usage costs.



## 02 High-efficiency permanent magnet synchronous motor

1. IP54 protection level, more stable and reliable than IP23 in harsh environments ;
2. Low temperature rise design, higher efficiency, extending the service life of the motor ;
3. Use ceramic-plated bearings to completely eliminate the impact of shaft current on the bearings ;
4. It is made of rare-earth permanent magnet materials, with large torque during starting and running, and small current during starting and running ;
5. Reasonable magnetic field design, magnetic density distribution, energy-saving motor has a wider working frequency range and low operating noise ;
6. Cooperate with the operation of the frequency converter to realize the frequency conversion soft start, avoid the strong mechanical impact of the machine when the motor is started at full voltage, which is beneficial to protect the mechanical equipment, reduce equipment maintenance, and improve the reliability of the equipment.



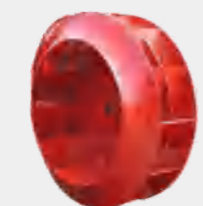
## 03 High-quality and efficient coupling

1. The coupling is a torsion elastic coupling with a failure protection function, which can effectively prevent and reduce the vibration and impact generated during operation ;
2. The elastic body is only subjected to pressure and can withstand greater loads. The drum-shaped teeth of the elastic body can avoid stress concentration.



## 04 Silent centrifugal fan

1. The whole system adopts centrifugal fans, which are more efficient and energy-saving ;
2. Compared with axial fans, centrifugal fans have higher wind pressure, lower noise and more energy saving ;
3. Using frequency conversion fan control, the oil temperature is constant, which greatly extends the service life of the lubricant ;
4. Due to the high wind pressure, the cooler and filter are less likely to be blocked.



## 05 Advanced and reliable electronic control system

1. The large-size color LCD touch screen has a good human-machine communication interface, and the touch screen has functions of preventing accidental touch and sleep ;
2. Customized vector inverter, perfectly matched with the motor, low frequency and high torque ;
3. According to the characteristics of low pressure, special programs are developed to fully monitor various parameters of the machine, and automatically control the state of the machine without special supervision ;
4. Configure the Internet of Things, you can view the unit operating status on your mobile phone ;
5. Independent air duct design, suitable for various working conditions.



## 06 Auxiliary oil supply pump

1. The auxiliary oil supply system is added to the unit to ensure that the unit (especially the bearing) can get sufficient oil supply in the later period of long-term operation, and the unit runs more stable and has a longer life ;
2. High temperature resistance, stable oil pressure at outlet ;
- 3 The oil pump uses a self-heating structure, which is simple and reliable.



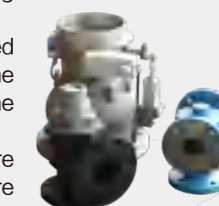
## 07 High-quality three filters

1. The filtration area of the air filter exceeds 150% of the normal requirement, with low intake pressure loss and good energy efficiency ;
2. The oil filter adopts an enlarged imported glass fiber material oil filter design . The rated processing capacity of the oil filter is  $\geq 1.3$  times the circulating oil volume, with high filtration accuracy and good durability ;
3. Folding and winding combined oil separation core is adopted for low pressure working conditions, which is more suitable for low pressure working conditions, with good filtration accuracy and low operating pressure loss; imported glass fiber material is selected ;
4. The layout of the three filter is reasonable, maintenance is convenient, and downtime is reduced.



## 08 Special valve group

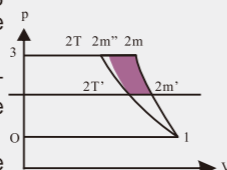
1. Intake valve: It adopts low-pressure special normally-closed butterfly valve, which is stable in work, high in air volume control accuracy, noise reduction design inside, low cavitation noise and long service life ;
2. Minimum pressure maintenance valve: low pressure dedicated valve, accurate opening pressure, to ensure stable pressure in the barrel, ultra-fast return to the seat, strong sealing, to ensure that the gas does not return, low pressure loss, and high efficiency ;
3. Temperature control valve (part): Mixed flow temperature control valve: The unit is equipped with a mixed flow temperature control valve to ensure that the unit is more convenient to start in a low temperature environment, and the oil supply of the unit is guaranteed at all times; the oil supply temperature of the main engine is guaranteed The unit is at its best performance.



# DHL(V)-Z Series Low-Pressure (Two-Stage) Permanent Magnet Screw Air Compressor

## 01 Industry-leading low-pressure two-stage air end

1. Low pressure + two-stage design, extremely energy-saving. The unique intermediate coolant jet curtain design reduces the temperature of the air, and the compression process approaches the most energy-saving isothermal compression. In principle, the two-stage compression saves 5%–8% of energy than the single compression ;
2. Two-stage compression, small compression ratio, less leakage, small bearing load, and greatly improved bearing life;
3. Adopt the design idea of "large rotor, large bearing, low speed" to reduce noise and vibration, and increase the life and stability of the air end ;
4. The tooth surface of the rotor is processed by a grinding machine to create a high-precision rotor, which is the first guarantee for the high efficiency and stability of the air end ;
5. Using a new type of asymmetric rotor tooth profile, high-precision three-coordinate measuring machine for comprehensive measurement, excellent quality ;
6. Compared with the atmospheric pressure machine with the same air volume, it can save energy by more than 50%, and it is more energy-efficient for industry applications. Protect the environment and reduce the use cost.



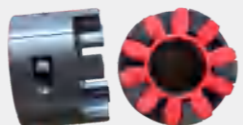
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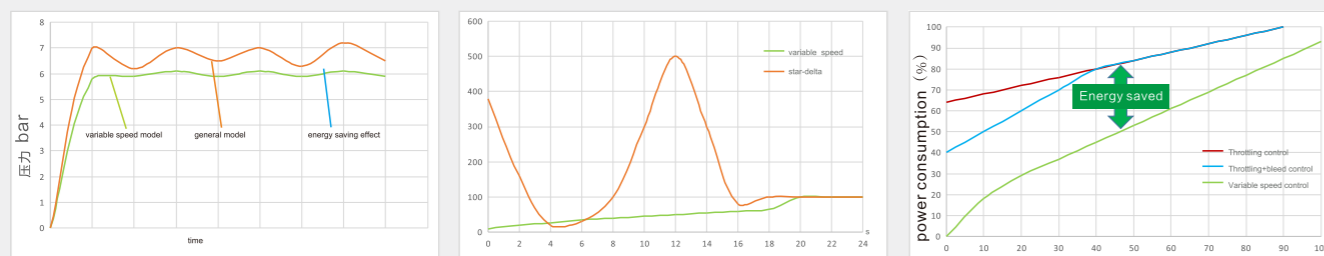
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## Overall energy saving

Compared with power fixed speed air compressor, variable speed air compressor has practical significance in energy saving.



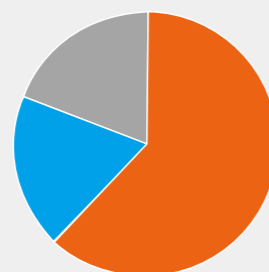
1.The pressure control of variable speed air compressor is precise. It can quickly respond to pressure changes, adjust the speed of the permanent magnet motor, control the pressure fluctuation range within  $\pm 0.1\text{bar}$ , stabilize the pressure of the pipe network, provide the necessary air volume with the most reasonable power, and reduce excess energy loss.

2.Variable speed air compressor adopts the method of frequency conversion start up, eliminating the peak current of star-delta start up and starting smoothly. Reduce the starting power, reduce the impact on the power grid and equipment, and can reduce the equipment operation noise.

3.Variable speed control is more excellent than ordinary throttle control. The adjustment range of the flow rate is larger, and with the high-efficiency permanent magnet motor, the energy saving effect is more significant at a low percentage flow rate.

4. Most of the cost in the life cycle of the air compressor is generated by the electricity it consumes. The power consumption of the compressor is closely related to the on-site air planning. The variable speed air compressor can not only ensure smooth production, but also save considerable electricity costs and achieve a win-win situation for the enterprise.

Cost of regular air compressor



Energy consumption Maintenance cost Purchase cost

Cost of variable speed air compressor



Energy consumption Maintenance cost Purchase cost Energy saved

## Product application scenarios



Incinerator: There are some pneumatic diaphragm valves and pneumatic instruments between the valve and the instrument system equipment. The action is realized by the drive of the air compressor. A large amount of dust generated by the combustion adheres to the inner wall of the boiler. Long-term accumulation causes a reduction in heat transfer efficiency, and fuel cost increase, so the air compressor also plays the role of blowing dust.

Grinder: Compressed air is supplied so that the materials entering the machine cavity will be frictionally rubbed and strongly impacted on the inner edge of the blade of the turbine in the rotating airflow, and will be ground again in the gap between the blade and the grinding block. At the same time of crushing and grinding materials, the turbine sucks in a lot of air. These gases play the role of cooling the machine, grinding materials and conveying fine materials.



## Cases



A certain glass factory, Wei Li, was established in March 1976, covering an area of 34,668 square meters, capable of producing various specifications of brown and white glass, with an annual output of more than 200 million pieces and an annual output value of up to 3 million yuan. For processing companies, time is money, and gas users purchase energy-saving and stable air compressors in the form of public bidding. After business and technology docking, Dream won the bid with a high cost performance.



A technology company purchases Dream DMLV-90A low pressure series air compressors for "microbial fermentation" projects, mainly engaged in bioengineering technology and other related chemical industries such as research and development, sales, and technical services.

## Intelligent Control Technology-smart Cloud Technology

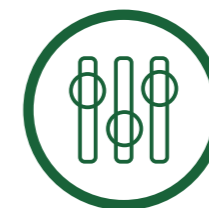
### Three major functions and values of cloud intelligent control



#### Digital Station

Intelligent control: Reduce operation and maintenance costs by 10-30%

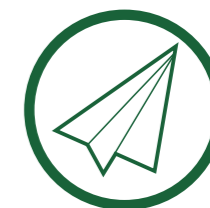
- 3D virtual air compressor station
- Dynamic data monitoring
- Workshop diagnosis report
- Online fault warning
- Maintenance cycle reminder



#### Intelligent control

Intelligent tuning: reduce labor hours by 250%

- Automatic control of air compressor
- AI algorithm autonomous tuning
- Device priority dynamic decision
- Intelligent control of auxiliary equipment



#### Energy saving of the whole station

Energy saving of the whole station: save 5-30% of power consumption in the workshop

- Edge computing technology
- Narrowband constant pressure technology
- Multi-parameter and multi-constraint control algorithm
- Big data visualization technology

### Digital station value

Total station monitoring and control (computer side)

1. Air compressor, refrigerated air dryer, adsorption air dryer, water pump, fan, waste heat recovery machine, flow meter, electric meter, etc.



## Customer Service And Support

▲ As an air compressor manufacturer, we are steadily moving towards service providers and creating value for customers, make our customers successful.

● Ensure the safe and stable operation of customer equipment and solve user's problems promptly. ● Training customer operation personnel and service personnel. ● Feedback information. ● Track corrective actions. ● Aircompressor Failure Report and Repair Process.

Response Time: We promise to get back to you within 24 hours.

Service Hotline: whatsapp/skype/wechat:+86 13482161490.



## DA FIVE-STAR SERVICE

Dream Air Compressor has always practiced the tenet of "Intimate service, meticulous manufacturing, assured price, careful after-sales service, and assured customers" to provide customers with a full range of services.

From survey site → installation and commissioning → rapid response → repair and maintenance → energy-saving transformation, the whole service is perfect, the process is standardized, and the service quality is strictly controlled.

Site survey



rapid response



energy-saving renovation



installation  
commissioning

maintenance



## Air Compressor System Solutions

Dream Air Compressor is committed to providing integrated compressed air solutions and one-stop service to simplify the needs of high-quality compressed air in all walks of life.

Dream Air Compressor has a full range of models, including piston type, screw type, scroll type, light oil, oil-free, water lubrication, power frequency, frequency conversion, permanent magnet frequency conversion, direct driving, integrated machine, single-stage compression, 17 product series, such as , stationary, mobile, low pressure, medium pressure (normal pressure), high pressure, after treatment equipment, etc., involving more than 500 products for customers to choose.



Note: This chart is for reference only, please consult Dream Engineers for detailed project plan.

DMLV-G  
Low pressure (Single Stage) Screw Air Compressor

DMLV-G单级 永磁变频低压螺杆机 DMLV-G single-stage permanent magnet variable frequency low-pressure screw air compressor	排气压力 Working pressure		排气量 Capacity		功率 Power		噪音 Noise	空气出 口管径 Air outlet pipe diameter	机组净重 Net weight	外形尺寸(mm) Dimensions(mm)			能效 Efficiency	
	bar	psig	( m3/min)	cfm	kW	hp	dB		kg	长 Length	宽 Width	高 Height	转速 Rotating speed	备注 Note
DMLV-22G	2.1-3.0	30-44	1.8-6.5	64-230	22	30	59±3	DN50	1330	1415	1030	1330	3300	Standard
DHLV-37G	2.1-3.0	30-44	3.4-11.6	120-410	37	50	62±3	DN65	1420	1900	1200	1650	3100	Energy saving
DHLV-55G	2.1-3.0	30-44	5.1-17.2	180-607	55	75	65±3	DN80	2100	2160	1500	1750	1480	Energy saving
DMLV-55G	2.1-3.0	30-44	4.6-15.8	162-558	55	75	65±3	DN80	1900	2160	1400	1750	2700	Standard
DHLV-75G	2.1-3.0	30-44	7.2-24.2	253-855	75	100	68±3	DN125	2830	2160	1830	2000	2100	Energy saving
DMLV-75G	2.1-3.0	30-44	6.0-20.5	212-724	75	100	68±3	DN125	2700	2900	1830	2000	2980	Standard
DHLV-90G	2.1-3.0	30-44	8.9-30.0	314-1059	90	120	70±3	DN125	4000	2900	1830	2000	1480	Energy saving
DMLV-90G	2.1-3.0	30-44	7.2-24.2	254-855	90	120	70±3	DN125	3800	2900	1830	2000	2970	Standard
DHLV-110G	2.1-3.0	30-44	10.9-36.5	385-1289	110	150	72±3	DN125	4600	2900	1830	2000	1800	Energy saving
DMLV-110G	2.1-3.0	30-44	9.6-32.4	339-1144	110	150	72±3	DN125	4000	2900	1830	2000	2950	Standard
DHLV-132G	2.1-3.0	30-44	14.2-47.6	501-1681	132	175	74±3	DN150	5000	3400	2050	2250	1490	Energy saving
DMLV-132G	2.1-3.0	30-44	11.3-37.9	399-1338	132	175	74±3	DN125	4800	2900	1830	2000	2700	Standard
DMLV-160G	2.1-3.0	30-44	12.8-42.8	452-1511	160	215	75±3	DN150	4800	3400	2050	2250	2950	Standard
DHLV-160G	2.1-3.0	30-44	15.7-52.7	554-1861	160	215	75±3	DN200	6200	4250	2280	2550	1650	Energy saving
DMLV-185G	2.1-3.0	30-44	19.1-63.8	645-2253	185	250	76±3	DN200	7000	4250	2280	2550	2000	Energy saving
DMLV-200G	2.1-3.0	30-44	21.0-70.2	742-2479	200	270	76±3	DN200	8000	4250	2280	2550	2300	Energy saving

Dream Compressor Specifications follow the principle of the followings:  
1.The value of the capacity is the air volume flow under the following conditions (temperature: 32℃, atmospheric pressure: 101.325KPa).  
2.The exhaust pressure is the value after the check valve.  
3.The noise value is the value in the room without echo, the test tolerance: 3dB(A).

DHLV-Z  
Low Pressure (Two Stage) Screw Air Compreeor

DHLV-Z双级 永磁变频低压螺杆机 DHLV-Z double-stage permanent magnet variable frequency low-pressure screw air compressor	排气压力 Working pressure		排气量 Capacity		功率 Power		噪音 Noise	空气出 口管径 Air outlet pipe diameter	机组净重 Net weight	外形尺寸(mm) Dimensions(mm)			能效 Efficiency	
	bar	psig	( m3/min)	cfm	kW	hp	dB		kg	长 Length	宽 Width	高 Height	转速 Rotating speed	备注 Note
DHLV-55Z	4.0-5.0	58-73	4.3-14.5	152-512	55	75	65±3	DN65	3500	2160	1350	1750	1485	Energy saving
DHLV-75Z	4.0-5.0	58-73	5.8-19.5	205-689	75	100	68±3	DN65	3750	2420	1530	1720	1485	Energy saving
DHLV-90Z	4.0-5.0	58-73	7.2-24.2	254-855	90	120	70±3	DN80	3800	3100	1830	2000	1485	Energy saving
DHLV-110Z	4.0-5.0	58-73	8.2-27.5	290-971	110	150	72±3	DN80	4200	3100	1830	2000	1485	Energy saving
DHLV-132Z	4.0-5.0	58-73	10.2-34.5	360-1218	132	175	74±3	DN125	4100	3500	2150	2250	1485	Energy saving
DHLV-160Z	4.0-5.0	58-73	12.6-42.2	445-1490	160	215	75±3	DN125	5900	3500	2150	2250	1485	Energy saving
DHLV-200Z	4.0-5.0	58-73	15.7-52.5	554-1854	200	270	76±3	DN150	7800	4100	2280	2550	1485	Energy saving
DHLV-220Z	4.0-5.0	58-73	17.3-58.0	611-2048	220	300	78±3	DN150	8000	4100	2280	2550	1485	Energy saving
DHLV-250Z	4.0-5.0	58-73	18.8-63.1	664-2228	250	350	78±3	DN150	8100	4100	2280	2550	1485	Energy saving
DHLV-280Z	4.0-5.0	58-73	22.3-74.8	788-2642	280	375	80±3	DN150	8500	4200	2350	2650	1485	Energy saving

4.Please consult our company for use in harsh working conditions such as with high temperature, extreme humidity, extreme cold and dust,etc.  
5.Dimensions and weight of the whole machine are subject to change without notice.  
6.Please do not use compressed air directly in medical equipment for human inhalation.