# **Energy-saving type** Screw air compressor



### Dream (Shanghai) Compressor Co.,Ltd.

• (Shanghai Operations Headquarters) No. 30, Lane 38, Caoli Road, Fengjing Town, Jinshan District, Shanghai (Zhejiang Manufacturing Center) No. 916, Chuangzhi Road, Xindai Town, Pinghu City, Jiaxing City, Zhejiang Province

Green energy, shared Dream

- **\$** 86-21-67350068
- ⊠ tanggaolu@dmcomp.com

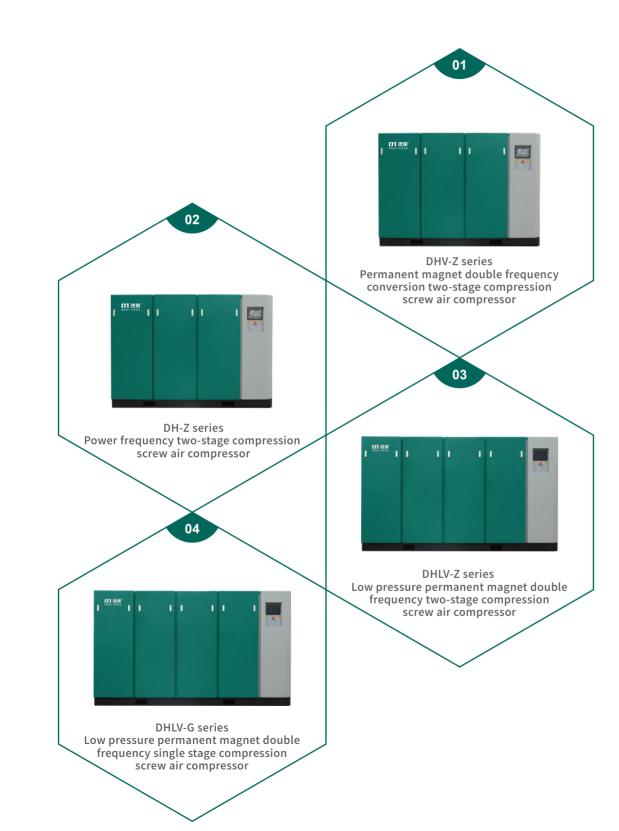


www.dreamcompressor.com www.dmcomp.com



STABLE | ENERGY-SAVING | CLEAN | AND EFFICIENT





## Catalogue/

01	About DREAM
02	DREAM culture
03	Corporate Honors
05	DREAM Intelligent M
07	Product characteris
09	DHV-Z series perma two-stage compress
11	DH-Z series power f screw air compresso
13	DHLV-Z series low p double frequency tv
15	DHLV-G series low p double frequency si screw air compresso
17	Energy saving and c

### GREEN ENERGY SHARED DREAM

lanufacturing

tics

anent magnet double frequency sion screw air compressor

requency two-stage compression or

pressure permanent magnet wo-stage screw air compressor

pressure permanent magnet ingle stage compression ors

ost reduction



# **ABOUT DREAM**







Dream (Shanghai)Compressor Co., Ltd. was established in Shanghai in 2011. It is a company is specialized in designing, manufacturing and sales of air compressors.

A high-tech enterprise that sells and provides system solutions. In the process of development, it has obtained the title of Shanghai Brand Cultivation Demonstration Enterprise, Shanghai Professional

It has won honors such as special new enterprise, energy-saving equipment contribution enterprise, high-tech achievement transformation project, etc. Its products are widely used in new energy, chemical industry & chemistry, Electronics, textiles, brewing industry,medicine & food and many other fields.

Dream pursues product design concepts that are stable, energy-saving, clean, efficient, easy to operate and easy to maintain, and insists on developing based on market demand and innovation.

Oriented by development, the company invests 10%-15% of its profits every year into new product research and development and the upgrading and optimization of new and old products. Innovation is always the priority for Dream.

The driving force for progress. Dream provides gas compression solutions, covering customer demand analysis, site investigation,technical solution design, and project completion.

This analysis, non-standard solution customization, solution demonstration and promotion. Provide exclusive compressed gas solutions based on project needs.

In the development process of more than ten years, Dream Company has always adhered to the enterprise spirit of "working together to dream together and striving for excellence" constantly innovating and pursuing excellence. Dream people continue to explore and innovate to meet customer needs and provide users with better products and services. So far, Dream has established more than 20 branches/subsidiaries at home and abroad, with footprints all over the world. Its excellent product performance and efficient service concept continue to create value for users.

Dream is always your reliable partner. We firmly believe that by working with us,you will experience our high-quality products and expertise.

With professional services, pursue your dreams and create a better future with Dream!

# **DREAM CULTURE**





VALUE  $(\checkmark)$ Concentric shared dream professional focused co-created shared

## Enterprise honor

- High-tech enterprise
  - Specialized in special new enterprises
    Energy-saving technology and equipment contributing enterprises
  - Shanghai brand cultivation model enterprise
- CE Certificates
- EMC Certificates
- TUV Rheinland Class 0 Oil Free Certificates
- Germany TUV product safety certification
- GCCA product quality and safety certification
- ISO 9001,14001,45001







## 德蒙(上海)压缩机械有限公司

上海市品牌培育示范企业 (2022-2025) 上海車鉄济和信息化委风会





Adhering to the business philosophy of "market-oriented,customer-centric,technical support and service guarantee",Dream is committed to providing customers with high quality products and industry-leading services. With Shanghai as the center and 20 service outlets nationwide as the auxiliary,Dream covers 34 provinces and autonomous regions of China's sales and service network,dedicated to provide customers with better service.

## Global service

Dream is committed to providing quality products and services on a global scale, and has conducted overseas operations in many countries and regions, including Southeast Asia, Europe, and the Americas, and has established strong partnerships in overseas markets. Our overseas agents have rich experience in cross-cultural communication and international vision, and are able to better understand and meet the needs of local customers and markets. In the future, we will continue to strengthen the development of overseas business, expand more overseas markets, and let China intelligent manufacturing shine on the international stage.



# Dream Intelligent Manufacturing Six core competencies

# | Full process cycle and service

We provide the whole process cycle service for customers to build gas stations or upgrade, covering compressed gas system research, evaluation, design, edge calculation, equipment installation, engineering installation, intelligent iot system control, equipment maintenance and so on.

## Service process



## | Performance pledge



Free pre-sale service



#### 7\*24 service

## Solution

Air compressor energy saving expansion Digital station house Intelligent control Whole station energy saving

Guarantee

assurance

Service

Global delivery

Full life cycle service

Performance pledge

19 national service outlets

Product quality assurance

Production cycle support

Product after-sales support

System engineering capability

Capacity supporting measures



Air compressor development technology Automatic digital technology Specialized application technology

## Engineering

Gas station renewal capacity Project management capability Engineering design capability Detail implementation ability

### GREEN ENERGY SHARED DREAM





13 months free maintenance



Lifetime warranty



**Regular** inspection



Dedicated maintenance files

## **Product characteristics**



#### The industry's leading dual-stage mainframe

1. The unique design of the intermediate coolant spray curtain reduces the temperature of the air, and the compression process is close to the most energy-saving isothermal compression. In principle, the two-stage compression saves 5%-8% of energy than the single-stage compression;

2. Two-stage compression, small compression ratio, less leakage, bearing load is small, bearing life is greatly improved;

3. Adopt the design idea of "big rotor, big bearing, low speed", reduce noise and vibration, increase the life and stability of the main engine;

4. The rotor tooth surface is processed by grinding machine to create a high-precision rotor, which is the first guarantee of high efficiency and stability of the main machine;

5. The use of new asymmetric rotor tooth type, high-precision coordinate measuring machine comprehensive measurement, excellent quality.

#### Special valve block

1. Screw compressor special intake valve, the unit is easy to start, with automatic adjustment function, low flow rate, low pressure loss, reduce energy consumption, low intake noise:

2. Reliable minimum pressure maintenance valve, low pressure loss, accurate control, super fast return seat, to ensure that the user does not return the gas; 3. Temperature control valve (part) : mixed-flow temperature control valve: The unit is configured with mixed-flow temperature control valve to ensure that the unit is more convenient to start in a low temperature environment, and ensure the oil supply of the unit at any time; By controlling the oil supply temperature of the main engine, the unit is guaranteed to be in the best performance state.



## High efficiency permanent magnet synchronous motor

1.IP54 protection grade, more stable and reliable than IP23 in harsh environments;

2. Low temperature rise design, higher efficiency, extend the service life of the motor;

 Use ceramic plated bearings to completely eliminate the influence of shaft current on bearings;
 Made of rare earth permanent magnet material, the torque is large when starting and running, and the current is small when starting and running;

5. Reasonable magnetic field design, magnetic density distribution, energy-saving motor operating frequency range is wider, low running noise;

6. With the operation of the frequency converter, the frequency conversion soft start is realized, which avoids the strong mechanical impact of the machine and equipment when the motor is started at full pressure, which is conducive to protecting the mechanical equipment, reducing equipment maintenance and improving the reliability of the equipment.





#### Advanced and reliable electronic control system

1. Large color LCD touch screen, with good man-machine interface, touch screen with anti-miscontact and sleep function;

 Customized vector inverter, perfectly matched with the motor, low frequency and high torque:
 Fully monitor the parameters of the machine, including voltage detection, three-phase imbalance detection, overpressure, overtemperature, etc., without special care;

4. Configure the Internet of Things, you can view the unit running status on the mobile phone;5. Independent air duct design, suitable for various working conditions.



#### Good quality three filter

1. The filtration area of the air filter exceeds 150% of the normal need, the inlet pressure loss is low, and the energy efficiency is good;

2. The oil filter is made of imported glass fiber material, and the rated capacity of the oil filter is  $\geq$  1.3 times the circulating oil volume, with high filtration accuracy and good durability;

3. Imported glass fiber oil core, good filtering effect, low pressure loss of oil core;

4. Three filter position design is reasonable, easy maintenance, reduce downtime.

### GREEN ENERGY SHARED DREAM



#### Silent centrifugal fan

1. Adopt centrifugal fan, new separate flow cooling fan design, with special cooler, cooling effect is better, more energy saving;

2. Compared with axial fans, centrifugal fans have higher wind pressure and lower noise;

3. Frequency conversion fan control, constant oil temperature, prolong the service life of lubricating oil;

4. Due to high wind pressure, the cooler and filter are less likely to be blocked.



#### High quality and efficient coupling

1. The coupling is a torsional elastic coupling with fail-safe function. It can effectively damp and reduce the vibration and shock generated during operation. 2. The elastomer is only subject to pressure and can withstand greater load, and the drum teeth of the elastomer can avoid stress concentration.





# DHV-Z series

# Permanent magnet double frequency two-stage compression screw air compressor

The whole machine has super first-level energy efficiency, second-level compression energy-saving host, permanent magnet synchronous motor efficiency Reach IE5 level、 silent centrifugal fan configuration, Dual frequency conversion design of the host fan, enlarged cooler side ceiling row design, hot and cold zone design, human-machine communication interface touch screen microcomputer. The controller monitors the operating status in real time.



Primary energy efficiency of whole machine



Host fan dual frequency conversion design



Energy saving II Compression host



Enlarged cooler side ceiling row design



Permanent magnet synchronous motor efficiency Reach IE5 level



Hot and cold zone design



Silent centrifugal fan design



Monitor operating status in real time

DHV-Z	Exhaust pressure		exhaust volume		ро	wer	noise	Air outlet pipe	aircrew net weight	dimensions(mm)			
series	bar	psig	(m³/min)	cfm	kW	hp	dB	diameter	kg	length	width	height	
	8	116	2.3-7.7	81-272	37	50	65±3	G2"	1600	1860	1180	1430	
DHV-37Zi	10	145	1.9-6.9	67-244	51	50	00-0	02	1000	1000	1100	1400	
	13	189	/	/	/	/	/	/	/	/	/	/	
	8	116	3.2-10.5	113-371									
DHV-45Zi	10	145	2.2-7.8	78-275	45	60	65±3	G2"	1780	1860	1180	1430	
	13	189	2.5-6.1	88-215									
	8	116	3.9-13.2	138-466									
DHV-55Z	10	145	3.1-10.7	109-378	55	75	65±3	G2″	1850	2160	1350	1750	
	13	189	2.6-8.8	92-311									
	8	116	5-16.8	177-593									
DHV-75Z	10	145	4.1-13.8	145-487	75	100	68±3	G2″	1900	2160	1350	1750	
	13	189	3.6-12.3	127-434									
	8	116	6-20.1	212-710									
DHV-90Z	10	145	5.2-17.3	184-611	90	120	70±3	DN65	2100	2420	1530	1720	
	13	189	4.8-15.9	170-562									
DHV-110Z	8	116	7.1-23.5	251-830	110	150	72±3	DN80	2800	2650	1600	1850	
	10	145	5.9-19.8	210-699									
	13	189	5.3-17.8	187-629									
DHV-132Z	8	116	8-28.1	283-992	132	175	74±3	DN80	3000	2650	1600	1850	
	10	145	7.3-24.3	257-858									
	13	189	6.1-20.2	214-713									
	8	116	10.1-33.6	356-1187		215	75±3	DN100	4000	3350	1900	1950	
DHV-160Z	10	145	9.2-30.5	323-1077	160								
	13	189	8.4-28	297-989									
	8	116	12.4-38.7	438-1367			76±3	DN100	4300	3350	1900	1950	
DHV-185Z	10	145	10.4-34.8	369-1229	185	250							
	13	189	9.7-32.3	342-1141									
	8	116	12.8-42.6	451-1504									
DHV-200Z	10	145	12.2-40.5	431-1430	200	270	76±3	DN100	4600	3350	1900	1950	
	13	189	10.6-35.1	374-1240									
	8	116	14.2-47.3	501-1670									
DHV-220Z	10	145	12.8-42.5	450-1501	220	300	78±3	DN100	5200	3700	2060	2150	
	13	189	12-37.4	424-1321									
	8	116	18.5-52.8	653-1865								2150	
DHV-250Z	10	145	15.1-48.3	533-1706	250	350	78±3	DN100	5900	3700	2060		
	13	189	13.3-43	470-1518									
	8	116	17.46-58.2	616-2053									
DHV-280Z	10	145	15.75-52.5	557-1856	280	375	80±3	DN100	6600	3700	2060	2150	
	13	189	14.4-48	509-1696									
	8	116	19.86-66.2	705-2350								2400	
DHV-315Z	10	145	17.43-58.1	618-2060	315	422	82±3	DN125	7000	4200	2300		
	13	189	15.21-50.7	540-1800									
	8	116	21.96-73.2	778-2592									
DHV-355Z	10	145	19.56-65.2	690-2299	355	476	82±3	DN125	7200	4200	2300	240	
	13	189	16.5-55	584-1945									





# DH-Z series

# Power frequency two-stage compression screw air compressor

The whole machine has super energy efficiency, more energy saving secondary compressor, YE3 high efficiency motor, silent centrifugal fan configuration, increasing the suction top row design of the cooler side, cold and hot zone design, man-machine AC interface touch screen microcomputer controller to monitor the running status in real time.



Primary energy efficiency of whole machine



Increase the design of the side suction and top discharge of the cooler



energy-efficient secondary compression host



Cold and hot partition design



YE3 high-efficiency motor



Real time monitoring of operational status



Silent centrifugal fan configuration



Imported brand contactor

DH-Z	Working pressure		capacity		power		noise	Air outlet pipe	net weight	Dimensions(mm)			
series	bar	psig	(m³/min)	cfm	kW	hp	dB	diameter	kg	length	width	heigh	
	8	116	12.8	452									
DH-55Z	10	145	10.4	367	55	75	65±3	G2″	2000	2160	1350	1750	
	13	189	8.8	311									
	8	116	16.5	583									
DH-75Z	10	145	13.5	477	75	100	68±3	G2″	2100	2160	1350	1750	
	13	189	12.2	431									
	8	116	20.1	710			70±3						
DH-90Z	10	145	17.3	611	90	120		DN65	2400	2420	1530	1720	
	13	189	15.9	562									
	8	116	23.5	830									
DH-110Z	10	145	19.8	699	110	150	72±3	DN80	3300	2650	1600	185	
	13	189	17.6	622									
	8	116	27.8	982									
DH-132Z	10	145	24	848	132	175	74±3	DN80	3500	2650	1600	185	
	13	189	20	706									
DH-160Z	8	116	33.3	1176	160		75±3		4500	3350	1900	1950	
	10	145	30	1059		215		DN100					
	13	189	28.2	996									
DH-185Z	8	116	38.6	1363	185	250	76±3	DN100	4600	3350	1900	1950	
	10	145	34.4	1215									
	13	189	31.8	1123									
DH-200Z	8	116	42.5	1501	200	270	76±3	DN100	4850	3350	1900	1950	
	10	145	40.2	1420									
	13	189	35	1236									
	8	116	47.1	1663	220	300	78±3	DN100	6000	3700	2060	2150	
DH-220Z	10	145	42.5	1501									
	13	189	37.2	1314									
	8	116	52.5	1854		350	78±3	DN100	6650	3700	2060	2150	
DH-250Z	10	145	48.2	1702	250								
	13	189	43	1519									
	8	116	58	2048		375	80±3	DN125	6700	3700	2060	2150	
DH-280ZW	10	145	52.3	1847	280								
	13	189	47.8	1688									
	8	116	66	2331									
DH-315ZW	10	145	57.9	2045	315	422	82±3	DN125	7500	3700	2400	2300	
	13	189	50.5	1783									
	8	116	73	2578						3700		2300	
DH-355ZW	10	145	65	2295	355	476	82±3	DN125	7600		2400		
	13	189	54.8	1935									
	8	116	85	3000									
DH-400ZW	10	145	74	2613	400	540	82±3	DN150	8900	4200	2400	2600	
	13	189	66	2330									
DH-450ZW	8	116	95.9	3386									
	10	145	84.1	2970	450	600	82±3	DN150	9200	4200	2400	2600	
	13	189	72	2542									
	8	116	103	3637									
DH-500ZW	10	145	95.5	3372	500	670	85±3	DN200	10500	4200	2400	260	
	13	189	77.8	2747									
	8	116	120	4237									
DH-560ZW	10	145	103.1	3640	560	750	85±3	DN200	11000	4200	2400	260	
	13	189	90	3178									

Note:DH-280ZW and above are water-cooled types, and there are no other unconventional air-cooled types, and the whole series can be customized water-cooled types.





**DHLV-Z** series

## Low pressure permanent magnet double frequency two-stage compression screw air compressor

Custom-designed secondary compression and low pressure special host, permanent magnet synchronous motor efficiency reached IE5 level, low pressure special oil and gas separation system design, lower oil content, silent centrifugal fan configuration, host fan double frequency design, increase the cooler side suction top row design, cold and hot partition design, man-machine AC interface touch screen microcomputer controller real-time monitoring operation status.



Customized secondary compression low-voltage dedicated host



Host fan dual frequency conversion design



Permanent magnet synchronous motor efficiency Reach IE5 level



Enlarged cooler side ceiling row design



Design of low-pressure special oil and air separation system



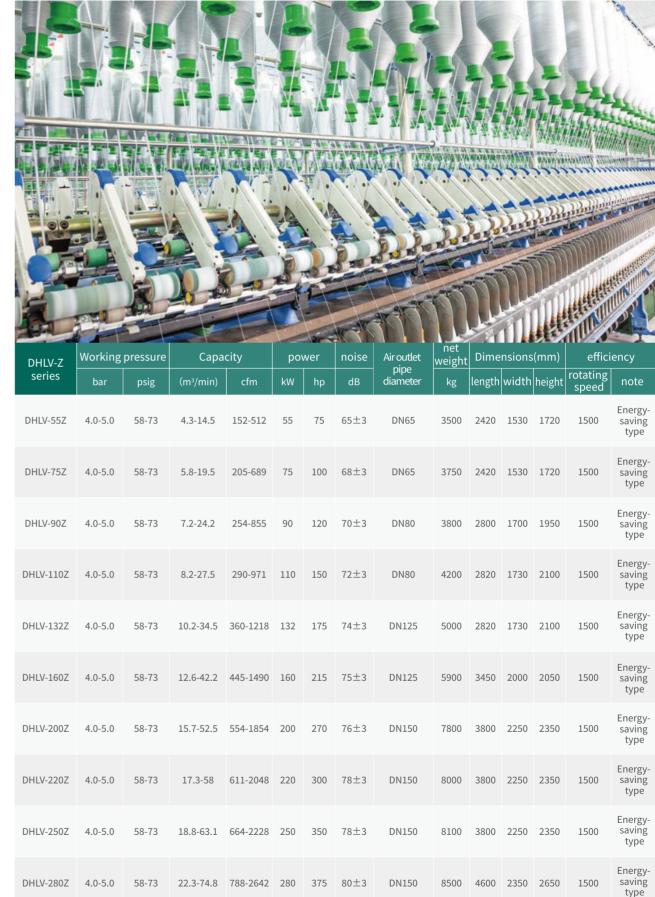
Hot and cold zone design



Silent centrifugal

fan design

Monitor operating status in real time



noise	Airoutlet	weight	Dime	nsions	(mm)	efficiency				
dB	pipe diameter	kg	length	width	height	rotating speed	note			
65±3	DN65	3500	2420	1530	1720	1500	Energy- saving type			
68±3	DN65	3750	2420	1530	1720	1500	Energy- saving type			
70±3	DN80	3800	2800	1700	1950	1500	Energy- saving type			
72±3	DN80	4200	2820	1730	2100	1500	Energy- saving type			
74±3	DN125	5000	2820	1730	2100	1500	Energy- saving type			
75±3	DN125	5900	3450	2000	2050	1500	Energy- saving type			
76±3	DN150	7800	3800	2250	2350	1500	Energy- saving type			
78±3	DN150	8000	3800	2250	2350	1500	Energy- saving type			
78±3	DN150	8100	3800	2250	2350	1500	Energy- saving type			
80±3	DN150	8500	4600	2350	2650	1500	Energy- saving type			



# DHLV-G series

# Low pressure permanent magnet double frequency single stage compression screw air compressor

Large rotor low speed and low voltage special host, permanent magnet synchronous motor efficiency reaches IE5 level, low pressure special oil and gas separation system design, lower oil content, silent centrifugal fan configuration, host fan double frequency conversion design, increase the cooler side suction top row design, hot and cold partition design, man-machine AC interface touch screen microcomputer controller real-time monitoring operation status.



Large rotor low speed and low pressure special host



Host fan dual frequency conversion design



The efficiency of permanent magnet synchronous motor reaches IE5 level



Enlarged cooler side ceiling row design



Design of low-pressure special oil and air separation system



Hot and cold zone design



Silent centrifugal fan design



Monitor operating status in real time

DM/HLV-G	Working pressure		Capacity		power		noise	Air outlet	net weight	dime	nsions	(mm)	Energy efficiency	
series	bar	psig	(m³/min)	cfm	kW	hp	dB	pipe diameter	kg	length	width	height	Rotational speed	note
DMLV-22G	2.1-3	30-44	1.8-6.5	64-230	22	30	59±3	DN50	1330	1415	1030	1330	3300	Standard
DHLV-37G	2.1-3	30-44	3.4-11.6	120-410	37	50	62±3	DN65	1420	1900	1200	1650	3100	Energy -saving models
DHLV-55G	2.1-3	30-44	5.1-17.2	180-607	55	75	65±3	DN80	2100	2160	1450	1750	1500	Energy -saving models
DMLV-55G	2.1-3	30-44	4.6-15.8	162-558	55	75	65±3	DN80	1900	2160	1450	1750	2700	Standard
DHLV-75G	2.1-3	30-44	7.2-24.2	253-855	75	100	68±3	DN125	2830	2900	1830	2000	2100	Energy -saving models
DMLV-75G	2.1-3	30-44	6-20.5	212-724	75	100	68±3	DN125	2700	2900	1830	2000	3000	Standard
DHLV-90G	2.1-3	30-44	8.9-30	314-1059	90	120	70±3	DN125	4000	2900	1830	2000	1500	Energy -saving models
DMLV-90G	2.1-3	30-44	7.2-24.2	254-855	90	120	70±3	DN125	3800	2900	1830	2000	3000	Standard
DHLV-110G	2.1-3	30-44	10.9-36.5	385-1289	110	150	72±3	DN125	4600	2900	1830	2000	1800	Energy -saving models
DMLV-110G	2.1-3	30-44	9.6-32.4	339-1144	110	150	72±3	DN125	4000	2900	1830	2000	3000	Standard
DHLV-132G	2.1-3	30-44	14.2-47.6	501-1681	132	175	74±3	DN150	5000	3400	2050	2250	1500	Energy -saving models
DMLV-132G	2.1-3	30-44	11.3-37.9	399-1338	132	175	74±3	DN125	4800	2900	1830	2000	2700	Standard
DMLV-160G	2.1-3	30-44	12.8-42.8	452-1511	160	215	75±3	DN150	4800	3500	2030	2230	3000	Standard
DHLV-160G	2.1-3	30-44	15.7-52.7	554-1861	160	215	75±3	DN200	6200	4250	2280	2550	1650	Energy -saving models
DHLV-185G	2.1-3	30-44	19.1-63.8	645-2253	185	250	76±3	DN200	7000	4250	2280	2550	2000	Energy -saving models
DHLV-200G	2.1-3	30-44	21-70.2	742-2479	200	270	76±3	DN200	8000	4250	2280	2550	2300	Energy -saving models
DHLV-250G	2.1-3	30-44	27.5-80	972-2830	250	350	77±3	DN200	8200	4400	2300	2200	2000	Energy -saving models

Note: Including standard version + energy-saving version

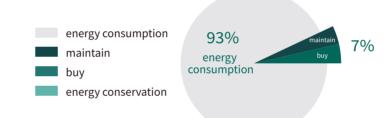
# **Energy Conservation**

Air compressors are the "electric tigers" in industrial electricity consumption, with an average power consumption of 20%. We have made a series of efforts and research on how to use the same electricity to create more air to help users save energy, and have made important breakthroughs. The permanent magnet variable frequency screw machine developed by the company can save users about 25-35% of electricity while ensuring the original work efficiency.

# Energy saving and cost reduction

When purchasing an air compressor, the traditional cost (i.e. purchase cost+maintenance cost) only accounts for 7% of the total cost, while energy consumption accounts for 93%. The two-stage compression direct connection/permanent magnet screw air compressor saves 25-30% energy compared to ordinary (power frequency) air compressors.

## — aking 75KW as an example





25%

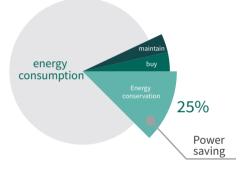
Superior to energy-saving

standards



Ordinary (power frequency) air compressor

### GREEN ENERGY SHARED DREAM





Dream air compressor

Desmond 75KW air compressor It saves about 25% of electricity a year