



P.M.F.C

PERMANENT MAGNETIC FREQUENCY CONVERSION

SCREW TYPE AIR COMPRESSOR

SINO-FOREIGN JOINT VENTURE PROFESSIONAL MANUFACTURER



SINO-FOREIGN JOINT VENTURE
PROFESSIONAL MANUFACTURE

Huade Electric Machinery & Equipment Co.,Ltd
HUADA Machinery Co.,Ltd of Quanzhou Fujian

NATIONAL SERVICE HOTLINE ////////////////

4001-555-885

////////////////////////////////////





Business Honor



Quality create Honor, honor is trustworthy!

SAVING 40% ENERGY
MORE THAN COMMON SCREW AIR COMPRESSOR

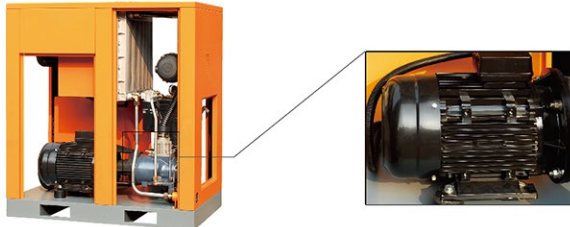


EVERY COMPRESSOR IS ABOVE NATIONAL ENERGY SAVING STANDARD.

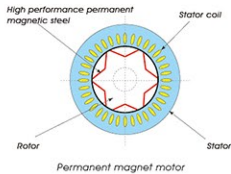
Air compressor is "electricity-eating tigers" in commercial power, Power consumption occupy 20%, but it is necessary equipment in enterprise. How to use the same electricity, to create more air, and realize energy conservation, we try hard and study it, now obtain important breakthrough. Under original work efficiency, Huada Permanent Magnetic Frequency conversion screw air compressor save 35% energy for user.

THE ADVANTAGE OF PERMANENT-MAGNET SYNCHRONOUS MOTOR

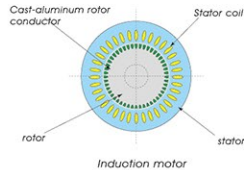
The features of Huda Permanent Magnetic Frequency conversion screw air compressor



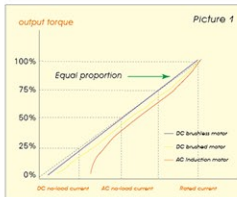
Permanent magnet use high-strength NdFeB(neodymium iron boron) magnetic steel, high magnetic energy product and coercivity of NdFeB magnetic steel, make rare-earth permanent magnet motor have small size, light weight, high efficient, good character etc., a series of advantages.



Stator coil alternating current generated rotating magnetic field ,drive Magnetic steel rotor rotating.

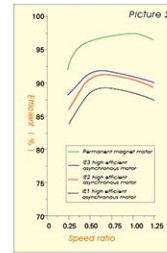


use Stator coil alternating current generated rotating magnetic field, to make rotor(The secondary conductor) generate induced current, then drive rotor rotating.



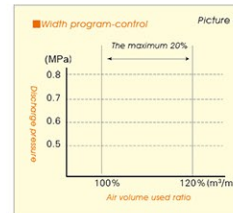
Slow-speed of revolution, high torque: output torque and incoming current of permanent-magnet synchronous motor become linear, the most suitable for rotating equipment applications of fix torque loading requirement (screw air compressor is the typical fixed torque loading device), big startup torque, easily overcome static friction force, a lot advantages, like frequently start and stop, sudden acceleration and deceleration, quick start, current not easy overload etc., (Picture 1)

Wider Frequency converting control range: permanent-magnet synchronous motor still keep high efficient under slow-speed of revolution, high torque, so the range of frequency converting control mode is wider, more stable operation, quicker response.



High efficient: the difference of permanent-magnet synchronous motor and common asynchronous motor is rotor structure, permanent magnet pole is installed instead of field winding to proceed excitation, no need Reactive excitation current, it will obviously improve power factor, reduce rotor loss, and no copper loss under stable operation, efficient reach more than 96%(Picture 2)

Smaller dimension: because energy consumption reduce, it will directly reduce waste heat inside motor, demand area of heat dissipation will also reduce, the dimension of motor can be reduced at least 30%, reduce weight 35%, the design is compact, reduce machine dimension.



Motor temperature protection function, ensure motor steady running: use PTC temperature sensor, to manage by controller, protect motor under temperature abnormal.

Width control technology, increase air delivery: under constant power precondition, on the basis of different exhaust pressure, adjust compressor rotate speed, to increase air delivery, the maximum increase 20%.

Use high-performance lubricating oil, ensure low residual oil: frequency conversion use specialized lubricating oil and inlet filter, to restrain the degradation of lubricating oil, furthermore via three stage separation, centrifugal separation, gravitational separation and filtering separation, dispose lubricating oil in the air, make exhaust residual oil control reach optimal level in the world.

ENERGY SAVING

HIGH ANTIJAMMING CAPACITY

LONG SERVICE LIFE

RELIABLE

05/06



OIL FILTER

Use rotation type oil filter. Totally filtering impurity inside lubricating oil, internally installed temperature control valve, adapt the temperature in different regions, ensure the quality of lubricating oil and oil pressure, easily change, don't worry about oil leakage.



PERMANENT MAGNET VARIABLE-FREQUENCY MOTOR USE SPECIALIZED NO INDUCTIVE OPEN-LOOP CONTROL TECHNOLOGY INVERTER

Directly use open-loop specialized variable-frequency speed control system. Via gradually increased frequency inverter to start, leave out encoder, easy maintain.



FRIENDLY INTELLIGENT OPERATION

Use computer controller. Humanized operation interface, not only adjust and monitoring compressor comprehensively, but high end network II, make remote network control become realistic.



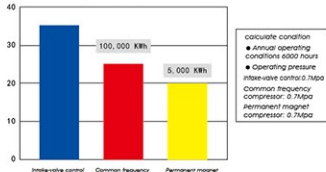
HOW TO SAVE POWER?

The new energy saving configuration is saving 35% more than common screw air compressor

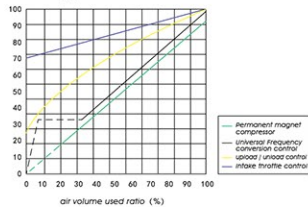
THE ELABORATIONS OF HOW HUADA PERMANENT MAGNETIC FREQUENCY CONVERSION SCREW AIR COMPRESSOR SAVING POWER:

- Eliminate inefficient conversion process from full load to unload. Avoid unload power consumption.
- Reduce the average of working pressure
- Reduce system leakage
- Provide free choice of pressure from 4bar to 13bar, which can minimize reduce energy consumption
- Under low rotating speed, permanent magnet motor work status is higher 20% above efficiency than common motor

● Annual electric charge cases (air volume used ratio 50%)
Examples of common 55kW frequency conversion compressor and permanent magnet frequency conversion compressor



● Energy performance curve



COST COMPARISON

When purchasing compressor, costs in the traditional sense (purchasing cost+ maintenance costs).Only 25% of to the total cost, while energy consumption cost is 75%.

Common (Variable frequency) compressor save 23-30% energy more than common (fixed frequency) air compressor;
 HUADA permanent magnetic frequency conversion screw air compressor save 33-40% energy more than common (fixed frequency) air compressor;

A common 75KW air compressor, running 8000 hours annually, electric charge is RMB0.78/degree, Electric charge for one year :
75KW*8000 hours*RMB0.78/ kWh =RMB468,000

HUADA permanent magnetic frequency conversion 75KW screw air compressor save about 35% energy annually. in total :
RMB468,000*35%=RMB163,800

Return on invest (ROI): **one year**



Common (fixed frequency) air compressor



Common (Variable frequency) air compressor



HUADA permanent magnetic frequency conversion screw air compressor



ENERGY SAVING



TECHNICAL PARAMETER

Model No.	LGPM-7.5	LGPM-10	LGPM-15	LGPM-20	LGPM-30	LGPM-50	LGPM-60	
Air delivery (m ³ /min)	0.8MPa	0.20~0.75	0.3~1.20	0.40~1.60	0.60~2.40	1.00~3.60	1.60~6.20	2.10~8.20
	1.0MPa	0.15~0.56	0.27~1.00	0.35~1.30	0.55~2.20	0.90~3.20	1.48~6.00	1.90~6.50
	1.2MPa	0.13~0.48	0.22~0.80	0.32~1.20	0.50~1.70	0.82~2.80	1.40~4.80	1.80~5.60
Cooling type	Air cooling							
Exhaust temperature(°C)	<Ambient temperature+15°C							
Oil Capacity(L)	12	12	14	14	16	18	24	
Noise level	62 dB(A)	62 dB(A)	65 dB(A)	65 dB(A)	65 dB(A)	68 dB(A)	68 dB(A)	
Driving mode	Direct Drive							
Electric motor	Power(KW)	5.5	7.5	11	15	22	37	45
	Starting mode	Variable Frequency starting						
Power	380V/50Hz							
Dimension	Length(mm)	850	850	1030	1030	1300	1400	1550
	Width(mm)	800	800	850	850	850	970	1000
	Height(mm)	1120	1120	1250	1250	1180	1350	1420
Weight(Kg)	280	380	400	450	550	750	1050	
Outlet diameter	3/4"	3/4"	3/4"	3/4"	1"	1-1/4"	1-1/2"	

Model No.	LGPM-75	LGPM-100	LGPM-125	LGPM-150	LGPM-175	LGPM-200	
Air delivery (m ³ /min)	0.8MPa	2.60~10.2	3.30~13.2	4.20~16.5	5.20~20.5	6.00~24.0	7.30~29.0
	1.0MPa	2.40~8.80	3.10~11.2	3.70~15.0	4.90~19.0	5.40~22.0	6.50~26.2
	1.2MPa	2.10~7.80	2.70~10.5	3.30~13.0	4.40~17.5	4.50~19.0	5.30~24.5
Cooling type	Air cooling						
Exhaust temperature(°C)	<Ambient temperature+15°C						
Oil Capacity(L)	54	72	72	90	90	90	
Noise level	72 dB(A)	72 dB(A)	72 dB(A)	75 dB(A)	75 dB(A)	75 dB(A)	
Driving mode	Direct Drive						
Electric motor	Power(KW)	55	75	90	110	132	160
	Starting mode	Variable Frequency starting					
Power	380V/50Hz						
Dimension	Length(mm)	1800	2000	2000	2600	2600	2600
	Width(mm)	1150	1200	1350	1450	1450	1450
	Height(mm)	1650	1750	1850	2000	2000	2000
Weight(Kg)	1450	1750	2000	2550	2950	3150	
Outlet diameter	2"	2"	2"	DN65	DN65	DN65	

The above technical parameters are subject to change without notice.

HIGH PROFILE
SUPERIOR QUALITY



GLOBAL SERVICE NETWORK

24-hour service hot line providing technical services to solve any problems of the user. If machine malfunction, engineer will be sent in time to solve the problem.

A professional sales team, professional technical engineers is consist of strong after sales service department, which is responsible for providing services to users all the year round, we will be in customer site to provide timely, superior service.

Provide Regular training for global agents and sales engineers annually in order to learn new products, new technologies, new materials, provide users the most advanced high-quality products and services.

Completely accessories, provide the bottom price for user, and sufficient stock.