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## PERMANENT MAGNET VARIABLE SPEED

SCREW AIR COMPRESSOR 7.5 kW-250 kW

WE TAKE CARE OF YOUR COMPRESSED AIR





**VDS SERIES** VDS 10 - 350 PERMANENT MAGNET MOTOR VSD SCREW AIR COMPRESSOR 7.5 kW-250 kW



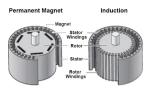


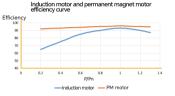
Save **Energy** 35-40%

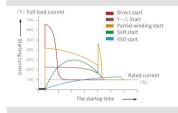


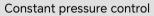
## Permanent Magnet Motor

- PM motor with high-performance neodymium iron boron (NdFeB) magnets
- The service life is more than 15 years
- Cancels the loss of the excitation system which improves efficeency 5%-12%
- The level 1 energy saving PM motor
- Compact structure.Small size.Light weight it cancel the excitation winding and the excitation I power(magnetic pole core), the structure is simple reliable operation and easy maintain
- High precision ,fast response,bigger starting torque





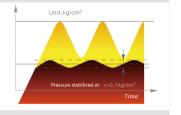




- 1. Provide the necessary amount of air with the necessary pressure
- 2.the pressure is stable below +/-0.1bar. 3. Saving energy ,no pressure loss energy sconsumption

## Smooth start No generating surge current

- 1. Through system control, the characteristic of variable frequency drive is that the motor starts
- 2. The motor always runs below the rated current
- 3. Effectively avoid the expensive cost of surge current generation



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## **Energy Saving Solution**

Compared with the fixed speed compressor, PM-VSD compressor, can save electric charge more than

## **75,356** kWh/year.

### 52,123kw.h+9,680kw.h+13,552kw.h=75,356kw.h/year

(abvoe data is the 37kw screw air compressor industry data.your factory actual saving value is depends on actual using condition)



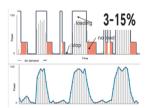
### Smart inverter

Advanced motor control technology, A wide speed control range of frequency converter prevents unnecessary power consumption for no- load operation



## Permanent magnet motor

High efficiency ,IE3 Permanent magnet motor reduce energy costs



#### No unnecessary pressure

Constant pressure setting reduce the pressure drop,1 bar of unnecessarily high pressure corresponds to about 7% of the energy



### Lossless direct drive

The direct connect in between the air-end and motor has reduce transmission loss for 100% efficiency



## **Visible Cost Reductions**

When purchasing industrial air compressors, adopt a forward-looking approach by prioritizing total lifecycle costs—including energy efficiency, maintenance, and operational expenses-over mere upfront purchase price.

This strategic perspective ensures long-term value and sustainability

## Why Energy Efficiency

Energy costs represent about 77% of the total operation costs of your compressor. That is why efficiently reducing the energy consumption of your compressed air installation should be a major focus.

# Why Variable Speed

As a majority of customers have a variable demand for compressed air ,variable speed compressor is superior VS fixed speed compressor in terms of energy saving by perfectly matching air supply to air demand of avoiding unloading losses.

## Why Permanent Magnet Motor

Permanent magnet is a high efficiency motor combines our variable speed technology with our new and highly efficient drive train, resulting in energy saving of up to 40%.

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## HIGH QUALITY KEY COMPONENTS

Ensuring product quality, stability, efficiency, and energy efficiency



### RELIABLE AIR-END

- Over Sized Air-end . Low Speed .No Overheat Problem
- The screw air-end is the core, with high-precision rotors ensuring enhanced stability, longer lifespan, and higher energy efficiency.
- . 8 sets of SKF brand bearings ensure the stability and long service life of the compressor air- end.



#### PERMANENT MAGNET MOTOR

- · Integrates high efficiency permanent magnet motor with high-performance neodymium iron boron (NdFeB) magnets
- IP54 dust/water resistance, and Class F insulation, it operates reliably in extreme temperatures from -30°C to 60°C.



### SMART INVERTER

- · Advanced control technology for PM motor driver
- Proportional motor speed control as per variable air pressure
- Industrial grade EMC protection,C2 and C3 specifications meeting there quirements of different power grids



## SMART CONTROL PANEL

- · Adopt a 7-inch touch screen panel(supports multiple languages)
- Monitor & control key compressor functions Protect compressor in the event of faults (Overload, high temperature)
- · Provide service required information(Replacement time for air filter, oil filter, oil gas seperator, and lubricating oil)
- . Control panel has the remind&record funtion, show the compressor situation clearly

## Technical Parameter

VDS Series Permanent Magnet VSD Screw Air Compressor

Туре	Power		Max. Working Pressure		F.A.D		Noise	Connection	Dimension (mm)	Weight
VDS10	7.5	10	8 10	116 145	1.0 0.9	38.8 31.8	68±2	Rp1/2	900*670*880	179
VDS15	11	15	8 10	116 145	1.88 1.2	66.4 42.4	68±2	Rp3/4	1080*750*1000	290
VDS20	15	20	8 10	116 145	2.2 1.9	77.7 67.1	68±2	Rp3/4	1080*750*1000	306
VDS25	18.5	25	8 10	116 145	3.0 2.2	105.9 77.7	68±2	Rp1	1380*850*1160	420
VDS30	22	30	8 10	116 145	3.6 3.2	127.1 113.0	68±2	Rp1	1380*850*1160	424
VDS40	30	40	8 10	116 145	5.0 4.2	176.6 148.3	70±2	Rp1	1380*850*1160	455
VDS50	37	50	8 10	116 145	6.2 5.3	218.9 185.4	70±2	Rp1 1/2	1500*1000*1330	641
VDS60	45	60	8 10	116 145	7.3 6.6	257.8 233.0	72±2	Rp1 1/2	1500*1100*1510	685
VDS75	55	75	8 10	116 145	9.2 8.2	324.9 289.5	72±2	Rp2	1800*1250*1670	1130
VDS100	75	100	8 10	116 145	12.6 11.0	444.9 388.4	75±2	Rp2	1800*1250*1670	1215
VDS120	90	120	8 10	116 145	15 13.8	529.7 487.3	75±2	Rp2	1900*1250*1810	1230
VDS150	110	150	8 10	116 145	19.8 16.8	699.1 593.2	79±2	DN65	2330*1470*1840	1870
VDS175	132	175	8 10	116 145	22.1 19.5	780.4 688.5	79±2	DN65	2330*1470*1840	1990
VDS215	160	215	8 10	116 145	28.5 22.8	1006.5 805.2	79±2	DN100	3250*2100*2200	3200
VDS250	185	250	8 10	116 145	30.0 28.0	1059.4 988.8	82±2	DN100	3250*2100*2200	3600
VDS270	200	270	8 10	116 145	32.5 29.2	1147.7 1031.2	82±2	DN125	2550*2300*2300	4500
VDS300	220	300	8 10	116 145	38.0 33.0	1342.0 1165.4	82±2	DN125	2550*2300*2300	5500

<sup>-</sup>According to the standard of GB 19153-2009 -Standard power supply:380V/50Hz/3Ph

<sup>-</sup>Compressor stage:One stage compression -Exhaust temperature: Ambient Temperature+15

<sup>-</sup>Please contact us for any specification that is not within the above mentioned standards.